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Final Draft



San Joaquin River Parkway Plan

Presented to

The San Joaquin Parkway Task Force

Dangermond & Associates, Inc.

in association with

Royston Hanamoto Alley & Abey

Regional Environmental Consultants, Inc.

2M Associates

Bell Associates

Walp & Moore

William B. Pond

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Final Draft March 13, 1992

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Preface

WHAT THIS PLAN IS

... AND IS NOT

This plan—both the maps and the text of the report—is diagrammatic and schematic. That is, the plan explains concepts, rather than represents actual things. It outlines and provides a structured framework for ideas so they can be considered by others.

The purpose of this plan is to convey to the San Joaquin River Parkway Task Force, or the individual reader, a broad and generalized picture of the proposed parkway in such a way that it can be assimilated and understood as a whole and that the community can decide whether it should be implemented.

Level of Detail

The plan covers many thousands of acres along the San Joaquin River and addresses many different aspects of the proposed parkway: location of facilities, financing, resource protection, management and operations, etc. It is necessary to present all these aspects without a lot of detail so that the proposed parkway can be looked at as a whole.

To depict the parkway so that all of it can be seen at once, the accompanying map is drawn at scale of 1 inch equals 2,000 feet. At this scale, all of the most important physical elements of the parkway can emerge without distraction by detail. Even though it requires more than 100 pages to cover all the many aspects of the parkway proposal, the text presents information at a level of detail that corresponds to the map.

Flexibility of Proposals

The location of trails and parkway facilities and other designation on the map are tentative. The completion of the parkway as proposed in this plan will take many years – possibly more than two decades. Over the years, as different trail segments and parkway facilities move into the construction planning phase, they can – and most probably will – be relocated and redesigned to respond to physical, environmental, fiscal, legal, and other constraints that become known later.

Thus, this plan is not a blueprint, a detailed site plan, or a property plat. It is impossible to construct anything from it. It needs to be general to have the flexibility to accommodate change in the future and reflect changing community priorities.

Limited Purpose and Effect.

This document is prepared for long-range planning purposes and does not imply a land acquisition commitment. The map and text indicate possible land uses proposed for the San Joaquin River Parkway, and suggest ways in which this plan might be implemented. It does not and cannot, however, provide assurances on future funding from any source, public or private. Moreover, no recommendation of this plan, if carried out, will change the right of the people to vote on taxes. It only suggests land uses; it is not a set of land use regulations.

Although the San Joaquin River Parkway Task Force was created by state statute (Chapter 1025, Statutes of 1990) enacted by the Legislature and signed by former Governor Deukmejian on September 19, 1990, and is made up of many distinguished local and state officials and community leaders of the Fresno-Madera metropolitan area, the Task Force is not a government agency and has no governmental powers. Its role has been to serve as a broadly representative advisory committee in the planning process.

The Task Force, by signifying its approval of this plan, will not have adopted any land use regulations, initiated a new tax levy, or made a commitment to acquire land. Land use regulation comes within the powers of the local governments with jurisdiction in the riverbottom: the County of Fresno, the City of Fresno, and the County of Madera. Decisions to acquire land in the future, and how to finance the acquisitions, will be made by the governing bodies of those jurisdictions in public hearings and in accordance with their duly established public processes and by the voters. Decisions involving state funds will involve affected state agencies and possibly a new managing entity created for the parkway.

Chapter 1 Introduction



THE REGIONAL SIGNIFICANCE OF THE SAN JOAQUIN RIVER

The San Joaquin River is the principal natural feature of the valley that shares its name.

As the river emerges from the Sierra Nevada foothills and crosses the valley floor, it has eroded a broad corridor with prominent – and sometimes very steep – bluffs. This riverbottom contrasts dramatically with the otherwise generally featureless plains extending away from the blufftops on both sides.

The river also establishes a political demarcation, as it is the county line between Fresno and Madera Counties in the area covered by this plan (Friant Dam to the Highway 145 crossing). Also, the Fresno city limits extend to the river along several reaches.

Lying to the south of the river, the City of Fresno has been the principal city of the San Joaquin Valley for much of the 20th Century, serving as its commercial, retail, legal, educational, health-care, and financial center. Fresno is also a large "market town" for the vast farming areas surrounding it. Many state and federal governmental agencies, farm cooperatives, and business organizations have found Fresno to be the ideal site for their principal or regional headquarters.

According to the 1990 census, the population of Fresno County is 646,800 and Madera County's is 89,100, for a total of 735,900. Their combined population is projected to grow by an additional 180,000 by 2000. Increased crowding and higher housing costs are anticipated to make the San Francisco Bay Area and Southern California coastal plain less attractive, relative to the Central Valley. During the coming decade, a growth rate of 39.5% is projected for Madera County and 22.5% for Fresno County, which are considerably higher than the statewide rate of 18.4% projected for the same period.

At these growth levels, it is not difficult to imagine the urbanizing areas of the two counties drawing very close together in the not-too-distant future, with only the river to separate them.

Over the past several decades, Fresno has steadily gravitated away from its original downtown, which was centered on the railroad depots, to areas closer to the San Joaquin River.

Much more recently, Madera County has begun to experience growth pressures, and considerable development is under consideration in the corridor along Highway 41 immediately north and west of the river.

The regional significance of the area and its expected growth were most recently reflected in the University of California's narrowing its search for a new campus to three sites in the San Joaquin Valley. Of these, one is in Madera County, immediately north of the river, and one is in Fresno County, several miles south of Millerton Reservoir, near the town of Academy.

The overall outlook in the coming decade is the emergence of a large bi-county metropolitan area with a combined population approaching 1,000,000, that continues in the role of regional headquarters and economic center for the San Joaquin Valley while absorbing a significant share of California's continuing surge in population growth.

¹ The data in this plan reflect official population projections made by the California Department of Finance, which estimates 34.9 million Californians by 2000 and 39.6 million by 2020. These estimates may be conservative. Basing his projections on optimistic assumptions about declining fertility and a pattern of immigration like the 1980's, Leon F. Bouvier (Fifty Million Californians? Center for Immigration Studies, Washington, D.C. 1991) foresees much higher growth rates, and projects a population of 37.8 million by 2000 to California and 53.8 million by 2020. While statisticians may disagree on the validity of different approaches, what seems most likely, barring some unforeseen catastrophe of major proportions, is that California's increasingly unmanageable growth will reach levels that can barely be comprehended today and will present nearly overwhelming challenges to policy-makers at all levels of government. Meeting the public's recreational needs and providing areas affording some relief from urban congestion and daily living pressures will be among those challenges. Also, trends indicate that the Fresno-Madera metropolitan area will continue to receive a disproportionate share of whatever the actual statewide population growth proves to be.

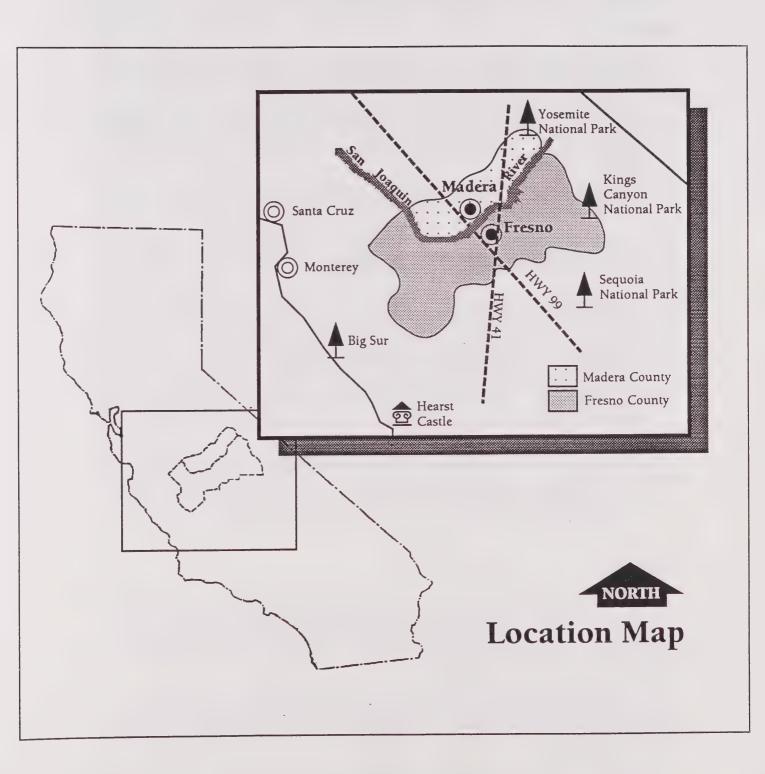
A growing awareness of this trend has focused heightened attention in the community on the San Joaquin River and the adjacent riverbottom. Concerns have been expressed that this important and singular asset in the San Joaquin Valley may be lost or significantly compromised as development spreads toward the river in both counties. With this growth, increasing levels of adverse impacts to the river and its resources seem inevitable, and there is a growing perception in the community of a fairly urgent need to manage better the human uses of the river and its resources.

The recommendations made in this report are based on the belief that the past and future regional prominence of the Fresno-Madera metropolitan area needs to be reflected in a significant undertaking to preserve and enhance, and provide for the appropriate enjoyment of, the one truly distinctive natural landscape of the region. The San Joaquin River has the potential to become the finest river parkway in the San Joaquin Valley due to its considerable length and the variety of natural resources and recreational opportunities distributed along it.

In addition, this effort will furnish practical benefits through enhanced economic activity and significantly improved recreational and educational opportunities that will be readily accessible from nearby urbanized and urbanizing areas. One measure of the recreational needs that have not yet been met in this region of the state is the fact that out of the nearly 300 units of the state park system, only eight are located in the San Joaquin Valley and the nearby foothills. Of these only two – Colonel Allensworth State Historic Park and Millerton Lake State Recreation Area – are at all close to the Fresno-Madera metropolitan area. This deficiency will, of course, become exacerbated with added population pressures.

The relationship of Fresno and Madera Counties, the part of the San Joaquin River included in the study area, and major recreational attractions and natural areas in central California are depicted in Figure 1-1, the location map on the next page.

Less tangible benefits include the citizens of the bi-county area being able to take pride in the fact that they can collaborate in conserving the river and its associated natural resources as a vital natural system that can thrive in the midst of the surrounding urban environment. If successful, this collaboration can sustain the urban environment's livability for its human inhabitants by providing a largely natural area where a variety of recreational pursuits can be enjoyed close to urbanized areas.



THE PLANNING PROCESS

OBJECTIVES

As first identified in the planning team's Proposal, the planning team and the many persons who participated in the planning process have pursued the following objectives in the course of preparing this plan:

- 1. Delineate the San Joaquin River Parkway and define its existing and future uses so that other land use and development decisions can proceed with a significantly clearer sense of ultimate uses of the important regional asset represented by the San Joaquin River and the adjacent riverbottom.
- 2. Achieve the greatest degree of consensus in the community and minimize incompatible land uses in the future.
- 3. Maximize involvement by the members of the Task Force, landowners, local officials, and interested members of the community in the planning process through regular consultations in large, general meetings and smaller working sessions.
- 4. Provide guidance in selecting potential funding methods and identifying the public agencies that should have managerial, administrative, and law enforcement responsibilities.
- 5. Establish criteria for determining land acquisition priorities and the sequence of other implementing actions to be taken toward realization of the parkway.
- 6. Facilitate the commitment of state and local government to address growing concerns of the general public about the environment, particularly with respect to the natural resources of the river and riverbottom.
- 7. Assist the community in achieving its desired balance among:
 - a. Maintaining, and restoring where feasible, the ecological values of the river and riverbottom;
 - b. Restoring degraded recreational assets; and
 - c. Meeting its land development and other economic goals, including sand and gravel production.

HIGHLIGHTS

This parkway plan resulted from Assembly Bill No. 3121², which was introduced by Assembly Member Jim Costa in the 1990 Session of the State Legislature and signed by Governor Deukmejian. This legislation set forth the general goals for the plan, appropriated \$200,000 in state funds for the plan, and provided for a San Joaquin River Parkway Task Force to focus community input in the planning process.

The Task Force is made up of representatives of state and local governmental agencies and various organizations with interests that would potentially be affected by a river parkway. Originally consisting of 14 members, the Task Force has grown to 26 members, all of whom serve without per diem or reimbursement of expenses. A list of the members of the Task Force is set forth in Appendix 3.

As spelled out in the California Department of Parks and Recreation's Request for Proposals and later reaffirmed by the Task Force, time was of the essence in preparing this plan. Dangermond &

² Chapter 1025 of the Statutes of 1990. An urgency measure, it took effect on September 19, 1990. The California Department of Parks and Recreation called for submittal of proposals by mid-March 1991.

Associates and the other members of the planning team responded by proposing to submit a first draft plan to the Task Force within four months of executing the contract, which was completed by the California Department of General Services in mid-August 1991. The first draft was submitted to the Task Force in late August.

An important aspect of the planning process is the requirement that the plan attempt to attain a high degree of consensus among the members of the Task Force. Thus, although the contract was awarded by the State, the Task Force is, functionally speaking, the client. From the outset of the planning process, in an effort to approach consensus as rapidly as possible, the planning team involved a steadily growing number of persons representing diverse interests and attitudes in the community.

The planning team first met with the Task Force on May 29, 1991, when the award of the contract to Dangermond & Associates, Inc. and the other members of the planning team was announced by State Parks Director Henry Agonia. The planning team shortly thereafter commenced numerous group and individual meetings, which continued through the beginning of August, to solicit ideas, hear people's concerns, and assist in formulating common goals.

Given the severe time constraints, emphasis was placed on establishing effective communications within the community so as to find as rapidly as possible the common ground that would lead to consensus on a schematic plan.

Many of these meetings were scheduled for groups with similar interests, such as landowners, sand and gravel producers, and representatives of environmental and recreational organizations. Numerous individual contacts were made in person and by telephone; in particular, an effort was made to meet individually with every owner of substantial acreage on or close to the river. Several meetings were held during the Fall with city and county planning staffs to assure the correct format and technical completeness of the parkway plan.

The planning team met with the full Task Force and interested members of the community on May 29, June 26, July 17, August 28, September 25, 1991, and January 8 and February 12, 1992. At the request of the Task Force, committees were not formally organized by the Task Force to study particular topics; instead, individual members of the Task Force participated in meetings according to their particular interests. At the larger meetings, attendance rosters were circulated to aid in building a mailing list of interested persons and thereby broaden participation.

GLOSSARY

This parkway plan attempts to employ a common vocabulary throughout its various parts, some of which have different authors from among the members of the planning team. The more important terms, and their definitions, are set forth in the following glossary.

"Acquisition" means obtaining a real property interest in land or water on mutually agreeable terms between the landowner and the acquiring entity. Because of the variety of possible transactions, unless the context clearly indicates otherwise, the term is intended to encompass all possible transactions, ranging from the purchase of fee title at full value to granting a short-term option for a nominal amount. A more detailed discussion of the various different types of acquisitions appears in Chapter 9.

"CEQA" means the California Environmental Quality Act, which establishes procedures for the review of the environmental impact of projects, including the preparation of an environmental impact report ("EIR").

"DFG" means the California Department of Fish and Game.

"DPR" means the California Department of Parks and Recreation.

"Managing entity" means the public agency with primary responsibility for managing, operating, administering, and maintaining the parkway and its facilities and for acquiring land and water areas for the parkway. In Chapter 8, the parkway plan proposes a locally-based state conservancy as the managing entity.

"MRZ-2" is a mineral resource classification and designation originating with the state Surface Mining and Reclamation Act of 1975 (SMARA) and used by the State Mining and Geology Board to indicate those mineral deposits that are regionally significant. The designation requires the affected local jurisdiction to reflect the regional economic significance of the minerals in its land use planning processes.

"Parkway" means those land and water areas along the San Joaquin River, in its riverbottom or on its immediate bluffs:

1. In which a public agency has fee title or a lesser property interest and manages the land or water area primarily for recreational or natural resource protection, conservation, and educational purposes; or

2. Which are identified in the parkway plan as potential candidates for acquisition for recreational or natural resource protection, conservation, and educational purposes.

"Parkway service area" means the urbanized and urbanizing portions of Fresno and Madera Counties that are less than one hour's driving time from the parkway. It does not include the predominantly rural areas in western Madera County and southwestern Fresno County and from the foothills to the crest of the Sierra Nevada. The service area is the same as the total territory of the proposed San Joaquin River Conservancy.

"Rank Island" is the same as "Cobbs Island" and "Island No. 1", as shown on U.S. Geological Survey maps of the area. Portions of Rank Island are referred to as "Elkins Island" in some records.

"Riverbottom" means all land and water areas lying between the toes of the bluffs on either side of the San Joaquin River from Friant Dam to the Highway 145 crossing.

"Special benefit zone" means the riverbottom plus contiguous areas extending outward from the bluffs for an average width of approximately 2.0 miles.

Chapter 2
Definition of the Parkway;
Goals, Objectives, and Policies



DEFINITION of the PARKWAY

As became evident at the outset of the planning process, there is no single, commonly accepted definition of what "parkway" means in the context of the San Joaquin River, the riverbottom, and adjacent blufftop areas.

What is clear is what "parkway" is not: the common dictionary definition — "a broad, landscaped thoroughfare" — fortunately does not seem to describe anyone's future image for the San Joaquin River and the riverbottom. The dictionary definition of "parkway" describes a fairly heavily travelled highway passing through a landscaped corridor. This kind of parkway is most often found in eastern U.S. cities; a closer example is the arterial streets traversing Golden Gate Park in San Francisco. Locally, Fresno's Kearney Avenue possibly meets the dictionary definition of a parkway. In heavily urbanized areas, the public use of this kind of "parkway" as a route of vehicular travel is usually at least as important as its recreational uses.

The planning process indicated limited interest in providing for even a controlled access roadway in the riverbottom parallel to the San Joaquin River. Instead, providing for wildlife protection and recreational opportunities are of primary concern in the community. It follows that facilitating vehicular access to the river should be limited to minimal access for recreational pursuits that do not involve the personal automobile except as transportation to the recreation site.

Therefore, the sense in which "parkway" is used in connection with the San Joaquin River appears to be more reflective of the concepts represented by modern terms such as "greenway", "linear park", and "natural corridor". None of these terms was used much by participants in the planning process, however.

This plan prefers to perpetuate the popular usage of "parkway", as it has served well in the planning process to denote the Fresno-Madera community's generally shared image of an elongated area of park and natural lands that parallels all reaches of the San Joaquin River from Friant Dam to at least the Highway 99 crossing. There is, however, much less agreement on the width of the parkway. Some consider the "parkway" to be the entire riverbottom from bluff to bluff; others question the need or appropriateness of any further acquisition of land by public agencies for additions to the "parkway".

The goals expressed for the parkway during the planning process suggest, however, that there is nonetheless general agreement that the parkway should provide for a harmonious combination of mainly low-impact recreational uses and wildlife protection and that the parkway's activity sites should be chosen so as to have minimal impacts on adjacent private property. Beyond this level of agreement the particular human activities to be provided for in the parkway become a largely subjective matter that mainly reflects individual recreational preferences or individual perceptions about the appropriate balance between facilitating recreational pursuits and protecting wildlife and isolating their habitat from human habitation and human activities.

Rather than selecting a single approach, these different preferences and perceptions have been reflected in this plan in recommendations of some areas for natural reserves, where wildlife protection predominates, and others for recreation areas, where recreation appropriate to the environmental setting and surroundings can be accommodated. Areas of transitional use can be found in those segments of the wildlife corridor that adjoin a trail.

³ Webster's Ninth New Collegiate Dictionary, Merriam-Webster, Inc., 1988.

The ELEMENTS of the PARKWAY

THE SAN JOAQUIN RIVER

The fundamental element of the parkway is, of course, the San Joaquin River. It has many beneficial uses and and functions today as aquatic habitat, a route of travel, a water source, a channel and floodway for transporting flood waters, a place to engage in recreation, and the outstanding scenic area of the Fresno-Madera metropolitan area.

EXISTING PUBLICLY OWNED LANDS

Existing publicly owned land and water areas at various locations fronting on, or close to, the river between Friant Dam and the Highway 145 crossing are considered by many in the community as existing elements of an already emerging parkway. Some of these lands are currently available for public recreational use, such as Lost Lake Regional Park, Skaggs Bridge Regional Park, and Woodward Park. Others protect habitat lands, such as the San Joaquin River Ecological Reserve (consisting of the separate Milburn Unit and Willow Unit) owned by the California Department of Fish and Game. These areas have not yet been developed to accommodate public visitation.

WILDLIFE CORRIDOR

Moving outward from the riverbank, the next element of the parkway is a wildlife corridor⁴ (and exterior buffer zones) of sufficient width to facilitate the movement of large mammals between habitat areas, to provide a variety of nesting and foraging areas for wildlife species that depend on or prefer the river environment for at least part of their existence, and to enhance and protect the aquatic habitats of the river and nearby wetlands. The corridor width will vary with terrain and the extent of land adjoining the corridor that is determined to be suitable for an expanded corridor or natural reserve.

NATURAL RESERVES

The plan identifies land and water areas in the riverbottom that, because of their relatively large geographic extent and the presence of diverse habitat types and relatively abundant wildlife, are recommended as natural reserves within the parkway. By providing for connections of land and water areas among all existing and proposed natural reserves, a continuous wildlife corridor can be created that will enhance the ecological values of the proposed natural reserves, as well as the existing ecological reserves acquired by DFG and those areas proposed for recreational use that are also usable habitat. In natural reserves, and along the wildlife corridor, human activities are limited mainly to trail uses, canoeing, and nature observation. A more detailed presentation of the wildlife corridor and natural reserves appears in Chapter 3.

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⁴ Because they constitute a single ecosystem, it would be more appropriate to refer to the wildlife corridor and the river together as a "riverine corridor". However, this plan uses "wildlife corridor" because that term has been consistently used by nearly all the participants in the planning process, including biologists and wildlife specialists, to reflect a predominant community interest in wildlife along the river. "Riparian corridor" has also been used in the same sense as "wildlife corridor", but the association of "riparian" with "riverbank" would in some instances connote a narrower corridor than is proposed for the wildlife corridor.

RECREATION AREAS

The plan identifies for parkway recreation those areas in the riverbottom where there are existing local and regional parks that should be expanded or improved or where there is land that could be developed for recreational use without compromising significant habitat values. Taking the recreation areas as a whole, a fairly complete range of recreational, educational, and interpretive uses are provided for, including intensive uses such as informal play on turf areas and camping in environmentally resilient areas that are distant from the wildlife corridor and natural reserves. A continuous, multipurpose trail will connect all the recreation areas and provide access to the river in some places and provide view overlooks of the riverbottom at others. Connecting this trail to existing or planned trails in areas along the parkway will result in the creation of a trail system that offers a variety of different route combinations and enhances public access to the parkway. Canoe launching and rest areas will be sited at various locations to create the opportunity for different length trips. More detailed presentations of the recreation areas and interpretive facilities appear in, respectively, chapters 6 and 7.

THE REALIZATION of the PARKWAY

As previously noted, because of acquisitions made in the past by state and local public agencies, elements of what could be considered the parkway exist today. The process of bringing the parkway to more complete realization can be envisioned as connecting those existing elements and, in certain areas, expanding the geographic extent of the parkway to improve its ecological values or provide for additional recreational opportunities.

Making these connections and expanding parkway areas will rely on the acquisition, principally by public agencies, of land that is currently in private ownership. The creation of a parkway cannot be accomplished solely through the regulation of the use of land that remains in private ownership, nor would it be at all desirable to do so. Moreover, throughout the planning process the desirability of the principle of purchasing land for the parkway from willing sellers only was reaffirmed and is reflected in this plan. Virtually all participants expressed disfavor to the managing entity making an acquisition by eminent domain – other than those instances in which so-called "friendly" condemnation can assist in meeting the landowner's objectives in the sale.

In addition to creating an unwanted climate of coercion, the use of hostile eminent domain results in unacceptable delays in project implementation and significantly higher acquisition costs as well as higher legal and political costs.

Land transactions that do not result in a full-value purchase of fee title can assist in realization of the parkway. There are a variety of alternative land transactions that can serve the needs of the landowner while also furthering the broader public interest in the parkway. These alternative transactions can include conservation easements; options; retention of a life estate; mitigation land banking; donations of whole or partial value to reduce income, estate, capital gains, or property tax liability; land exchanges; and voluntary land resource management programs. They can be as effective in assisting in the creation of the parkway as is the purchase of fee title—while having the added advantage of often enabling the landowner to retain or make a disposition of property on terms that are more closely adapted to his/her particular needs. A variety of sample land transactions are discussed in detail in Chapter 9, and some of the potential means of financing land acquisitions are discussed in Chapter 10.

The actual decision to make an acquisition and carry it out involves the interaction of a willing seller and a public agency that has the funding to purchase the land, or can complete an alternative transaction, on mutually acceptable terms. When a given transaction can be accomplished and what the particular terms of each transaction will be cannot, of course, be predicted and reflected in this plan. The decision about the precise area to be acquired should reflect the cooperative consideration of the particular uses, and their placement, intended by the

landowner for the remainder and the proposed placement of any parkway facilities and the location of areas proposed for inclusion in the wildlife corridor or a natural reserve.

Moreover, based on experience with other large projects and conservative project financing expectations, it is not likely that all lands proposed for acquisition for the parkway can or will be acquired over the next two decades, even if all landowners were willing sellers.

EXISTING PLANS

The parkway plan affects three jurisdictions: the County of Fresno, the County of Madera, and the City of Fresno. Each entity's existing general plan (or applicable community plan) and zoning requirements are similar as they relate to the parkway, but have sufficient differences so that they lack common zoning and general plan terminology.

The following general plans and community plans have been reviewed to assure that this parkway plan is consistent with them:

County of Fresno General Plan
County of Madera General Plan 1969 (in revision)
City of Fresno General Plan 1984, including the:
Woodward Park Community Plan 1989
Bullard Community Plan 1988

Cumulatively, the adopted plans, ordinances, codes, and policies of the counties and the city indicate strong concern for protection of the San Joaquin River and the riverbottom. The parkway plan conforms with the existing plans in all important respects, including, in particular, minimum acreage requirements for development. This parkway plan is intended to further the process of carrying out the policies and meeting the goals of those plans.

GOALS, OBJECTIVES, and POLICIES for the PARKWAY

This section is a compilation of the goals, objectives, and policies of the parkway plan that appear in the more detailed discussion of particular topics in succeeding chapters. The goals, objectives, and policies are compiled and organized so they can be considered and acted on by the three affected jurisdictions with land use regulatory authority: the County of Fresno, the County of Madera, and the City of Fresno. It is anticipated that each jurisdiction will take separate action to incorporate these goals, objectives, and policies into its General Plan or the applicable community plan. The effectiveness of these goals, objectives, and policies in guiding the realization of the parkway will depend, however, on the extent to which the action taken by each jurisdiction conforms to the actions of the other two.

Having the same goals, objectives, and policies among the three jurisdictions will facilitate the more uniform implementation of the parkway plan and will enable the proposed San Joaquin River Conservancy (or other multi-agency managing entity created for the parkway) to carry out its responsibilities in land acquisition and parkway operations on a consistent basis in all three jurisdictions.

In addition, having the same goals, objectives, and policies is important from the standpoint of consistency and fairness in dealings with affected landowners, particularly with respect to each jurisdiction being able to offer the same incentives to landowners for avoiding or minimizing impacts to the parkway as are available to landowners in the other jurisdictions.

INTRODUCTION

The San Joaquin River is the principal natural feature of not only the Fresno-Madera metropolitan area but also of the entire San Joaquin Valley. The river and many areas of the riverbottom between Friant Dam and the Highway 145 crossing offer attractive recreational opportunities and have significant natural habitat areas. The principal economic uses are agriculture, sand and gravel extraction, and aquaculture. These characteristics subject the area to diverse and often competing interests. It is attractive in both its natural state and for development for urban uses. But, development characteristically results in the clearing of land to allow for construction, excavation, or landscaping that impinges on plant and wildlife habitat. The area also presents hazards to development from flooding. Water quality problems may occur if the groundwater is degraded by development. There is a great potential for adverse impacts and, therefore, a need for specialized planning.

PARKWAY BOUNDARY

As proposed in this plan, the parkway would consist of the San Joaquin River and approximately 5,900 acres on both sides of the river between Friant Dam and the Highway 99 crossing, plus the existing 17-acre Skaggs Bridge Regional Park at the Highway 145 crossing. Approximately 1,900 acres of the parkway would be located in Madera County and 4,000 acres, in Fresno County. Of the 4,000 acres in Fresno County, approximately 1,250 acres are already in public ownership.

The area within the proposed parkway varies greatly in width from, in some places, a narrow wildlife corridor where the river bluff is steep and close to the river, to extensive areas of several hundred acres each that are suitable for a natural reserve or recreation area. The parkway boundary and the areas and features proposed for the parkway are depicted in the loose map, in two separate sheets, accompanying this document. The boundary includes land and water areas that are candidates for acquisition to connect existing parkway elements or to improve the ecological values of the parkway or provide for additional recreational opportunities.

The location recommended for the boundary is based on a complex interaction of numerous factors, which include the following:

- Existing riparian vegetation and other sensitive plant communities. (Virtually all areas are included within the boundary.)
- The potential for vegetation restoration in areas where gaps in the wildlife corridor exist.
- Habitat for foraging, nesting, and breeding.
- Wildlife movement patterns.
- Land and water areas anticipated to be reclaimed from sand and gravel mining.
- Flood hazard areas.
- Visual impacts, as viewed from the river and from blufftops.
- Existing recreation patterns.
- Current and future recreational needs.
- Available access routes into the riverbottom from urban areas.
- Hazards and public safety considerations.
- Location of existing publicly owned land.
- Opportunities to purchase privately held lands or obtain easements.
- Existing land use patterns and adjacent land uses.
- Compatibility of existing and proposed land uses in the parkway and adjacent areas.

This boundary thus delineates a "zone of interest" that encompasses those lands that the plan recommends as necessary or suitable for inclusion in the parkway. This zone of interest depicts acquisition possibilities for planning purposes only. Marking a boundary for the parkway on a map or describing it in this plan is not an indication that any particular parcel or any "split" parcel will be acquired. Public review of this plan in the course of implementing it, procedures involved

in CEQA compliance, and the terms of particular transactions completed will determine the ultimate acreage of the parkway and the particular land and water areas included within it.

Approximately 2,900 acres of the estimated 4,650 total acres that are not publicly owned or operated and are within the parkway boundary should be acquired in fee title for recreation areas, trail corridors, or natural reserves. Of the 2,900 that should be acquired in fee title, approximately 950 acres are located in Madera County; and 1,950, in Fresno County. The remaining 1,750 acres within the parkway boundary consist of lands that are suitable for acquisition through an easement or other lesser property interest or lands that are expected to become "split parcels", with a part of each remaining in private ownership. In addition, acquisition of some large parcels may result in part being used as a recreation area or natural reserve and the remainder not suitable for those purposes being sold or exchanged as surplus to parkway needs.

Moreover, the parkway boundary should not be regarded as a limitation on acquisition of additional land and water areas for the parkway as opportunities arise in the future. If funding is available and higher land acquisition priorities are met, consideration could be given to, for example, acquiring easements from willing landowners to protect riparian vegetation in the reach of the river downstream of the Highway 99 crossing, adding to a recreation area to meet increased demand, etc. Acquisition priorities are presented in detail in Chapter 9.

This boundary also serves to indicate the approximate extent of the eventual administrative jurisdiction of the public entities responsible for constructing and operating facilities within the parkway and patrolling and maintaining the parkway. As discussed in Chapter 8, these functions should primarily be the responsibility of the proposed San Joaquin River Conservancy, a new managing entity proposed to be made up of the state and local agencies that currently own and manage land in the area of the proposed parkway, have the authority to regulate land use, or have funding sources suitable for the parkway. Some functions would be carried out by the new entity directly; others, by the individual member agency that has a particular interest or expertise affecting an area of the parkway.

This boundary does not, however, represent any transfer of authority over zoning, specific plan approvals, and other municipal land use controls, which remain under the authority of the two counties and the City of Fresno. To facilitate the uniform application of the goals, objectives, and policies that relate to land use controls within the parkway, the three affected jurisdictions should establish a single overlay zone. This new zone should recognize existing land use entitlements while providing for implementation of the goals, objectives, and policies of the parkway plan.

FUNDAMENTAL GOALS

In the course of public meetings and workshops in the community and numerous individual conversations and written communications, the following fundamental goals were expressed for the San Joaquin River and adjacent riverbottom areas:

Preserve and restore a riparian corridor of regional significance along the San Joaquin River from Friant Dam to the Highway 145 crossing.

Protect wildlife species that depend on or prefer the river environment for at least part of their existence.

Provide for conservation, education, and recreation, particularly a continuous trail, in a cooperative manner with affected landowners.

Protect irreplaceable natural and cultural resources in a way that will also meet people's recreational and educational needs.

Protect existing undeveloped areas of the riverbottom, which should remain nonurbanized and be retained in open space or agriculture if feasible.

Provide land use and management policies for the San Joaquin River and areas of the riverbottom included in the parkway that will enhance the attractiveness of the Fresno-Madera metropolitan area and enhance the quality of life of its residents.

These fundamental goals remained consistent throughout the planning process. They all apply to the wildlife corridor, natural reserves, and recreation areas within the parkway.

In the remainder of this section, these fundamental goals are made more specific through Specific Goals, Objectives, and Policies, which are applicable to particular land uses in the parkway and which serve as a summary of the plan.

LAND USE ELEMENT

LAND USE DESIGNATIONS

The following are generalized land use designations used in this parkway plan and the following Specific Goals, Objectives, and Policies.

Natural Reserve means land and water areas managed as habitat for plants and wildlife. Natural resource protection predominates, but compatible levels of human activity, principally trail use, canoeing, fishing, and nature observation, are allowed. Examples of existing natural reserves are the Willow and Milburn Units of the San Joaquin River Ecological Reserve and portions of Lost Lake Regional Park, a Fresno County facility.

Wildlife Corridor means land and water areas parallel to and along the San Joaquin River that are of sufficient width to facilitate the movement of large mammals between habitat areas, to provide a variety of nesting and foraging areas for wildlife species that depend on or prefer the river environment for at least part of their existence, and to enhance and protect the aquatic habitats of the river and nearby wetlands. "Wildlife Corridor" also means a branch corridor in a ravine connecting Little Table Mountain with the river. In wildlife corridors, natural resource protection predominates, but compatible levels of human activity, principally trail use, canoeing, and nature observation, are allowed, with trails and footpaths aligned to skirt as much of the wildlife corridor as possible and buffered to minimize human impacts.

Recreation Area means discrete, publicly operated areas that are managed predominantly for human recreational use in settings where landscapes (existing or restored) feature native vegetation and improvements are kept to the minimum needed to serve the visiting public and to meet sanitation, security, and safety requirements. Irrigated turf and paving will be provided, but only to the extent needed to provide access and accommodate activities requiring such surfaces. The types of uses to be accommodated at recreation areas are limited mainly to hiking, jogging, bicycling, swimming, canoeing, picnicking, fishing, golfing, informal play on turf areas, equine riding, nature observation, nature study and educational/interpretive programs, camping (tent, trailer, and RV), and supporting retail. Not all uses will be accommodated at a single recreation area, however; the size of the recreation area and its location will influence the types of uses accommodated. In addition to the recreation areas, the parkway will also have a continuous, multipurpose trail between Highway 99 and Friant Dam connecting the recreation areas and natural reserves in a recreational system and providing linkages to local and regional trails/bikeways originating in surrounding areas. Canoe put-in and take-out and rest stops are to be provided within recreation areas and at identified points along the river.

SPECIFIC GOALS, OBJECTIVES, and POLICIES

Natural Resources

Goals:

- 1. Promote the long-term preservation, enhancement, and public enjoyment of the aquatic, plant, and wildlife resources of the San Joaquin River and the riverbottom.
- 2. Preserve existing habitat and maintain, enhance, or restore native vegetation to provide essentially continuous riparian and upland habitat for wildlife along the river between Friant Dam and the Highway 145 crossing.

Objectives:

- 1. Protect the San Joaquin River as aquatic habitat and a water source. Enhance and protect fisheries in the river and in lakes in the parkway.
- 2. Protect and manage existing publicly owned lands with suitable habitat as natural reserves and segments of the wildlife corridor.
- 3. In areas that are not publicly owned or managed, establish, through purchase, easements, or other mutually satisfactory arrangements, a continuous wildlife corridor along the river of sufficient width to facilitate the movement of large mammals between habitat areas, to provide a variety of nesting and foraging areas, and to enhance and protect the aquatic habitats of the river and nearby wetlands.
- 4. Control/remove exotic plant species from the parkway in areas, including the river channel, where they threaten to displace native plant species or disrupt natural plant community structure.
- 5. Revegetate with native species to close gaps in the wildlife corridor or enhance the effectiveness of buffer zones.

Policies:

- 1. Provide a minimum width for the wildlife corridor of 200 feet on both sides of the river. Acquire a wider corridor whenever possible to provide greater habitat diversity and protect additional areas of native vegetation. Provide a buffer wider than 150 feet whenever more intensive uses on adjacent lands exist or are planned. Exceptions may be necessary where the minimum-width corridor or buffer or both is infeasible due to topography or other physical constraints. In those instances, provide an offsetting expansion on the opposite side of the river. Where steep bluffs drop directly into, or close to, the river, acquire the bluff face for incorporation in the corridor.
- 2. Acquire, through purchase, easements, or other mutually satisfactory transactions, land for natural reserves, principally in those areas adjoining the wildlife corridor along the river where the largest acreages of highest quality habitat exists and land for a branch wildlife corridor connecting the river and Little Table Mountain.
- 3. Consistent with CEQA requirements, mitigate any unavoidable removal of native vegetation through the acquisition of additional habitat areas in the parkway, restoration of vegetation in degraded areas in the parkway, or a combination of both.

- 4. Coordinate vegetation restoration programs among federal, state, and local agencies with flood control responsibilities and public agencies with natural resource management responsibilities to avoid flood control problems.
- 5. Compile baseline data on, and monitor the health of, natural resources, including water quality.
- 6. Obtain updated floodplain maps, which reflect changed hydraulic characteristics of the river, to guide the siting of parkway facilities and private development. In the interim, do not construct any parkway facilities that would sustain anything more than slight damage from inundation in any area where there is a potential flood risk. Engineer service roads, trails, and bridges to avoid/minimize significant flood damage.
- 7. Do not construct levees in the parkway.
- 8. Implement site-specific protections through development entitlement or development permit conditions, or both, as follows:
 - a. Provide a buffer zone of a width appropriate to the intensity of the planned land use.
 - b. Preserve and incorporate natural features (e.g., wetlands, grasslands, woodlands, and other native vegetation) and supporting artificial features (e.g., lakes on reclaimed mined lands) into the development's site design such that those features can serve as a buffer for, and enhance the ecological values of, the river, the wildlife corridor, a natural reserve, or the multipurpose trail.
 - c. Incorporate the site's natural topography with respect to the design and siting of all physical improvements in order to minimize grading.
 - d. Establish, in consultation with appropriate public agencies with special expertise, special development and operational standards as needed to supplement existing law and regulations to avoid or reduce any adverse impacts of water runoff or outdoor lighting.
 - e. Confine or exclude pets that could harass or prey on wildlife in nearby areas of the parkway.
 - f. Incorporate requirements of state or federal law or any local ordinance prohibiting or restricting modification of protected vegetation or threatened or endangered species' habitat.
- 9. Prevent and control undesirable activities and unlawful conduct in natural reserves and along the wildlife corridor as the first priority of rangers and other parkway personnel.

Special Policies relating to Flood Management⁵

1. The parkway plan will explicitly recognize that use of the river and floodway to transport floodwater is a beneficial use which must be protected.

⁵ Source: San Joaquin River Management Program Advisory Council. Quoted from March 5, 1992, letter from Robert G. Potter to Dangermond & Associates.

- 2. The parkway will be managed to maintain the combined existing flow capacity in the river channel and the designated floodway.
- 3. The parkway will be managed to maintain the river stage required to pass any given flow, thereby not increasing flooded area and and not requiring an increase in the designated floodway unless the resulting loss in private land value is first purchased from willing sellers.
- 4. The parkway will be managed to allow for the restoration by other parties of channel and floodway flow capacity to the stage/flow relationship that existed at the time Friant Dam was completed.
- 5. Parkway lands will be managed to control and reduce erosion in the floodway.
- 6. The parkway will be managed to preserve private water rights and associated diversion facilities.

Recreation Areas

Goals:

- 1. Preserve and manage the natural and cultural resources in the parkway, including archaeological and Native American sites, to meet current and future recreational and educational needs.
- 2. Provide recreational and educational opportunities to all segments of the population.
- 3. Manage recreational uses to reduce or eliminate indiscriminate activities, trespass on private lands, and human impacts on sensitive habitat areas.
- 4. Evaluate all parkway facilities and features from the perspective of their potential for education or interpretation.

Objectives:

- 1. Locate intensive recreational activity sites away from sensitive natural resources and private residences.
- 2. Prevent and control undesirable activities and unlawful conduct in the parkway.
- 2. Link all recreation areas and natural reserves between Highway 99 and Friant Dam with a continuous, multipurpose trail on land and with canoe put-in, take-out, and rest areas along the river to create a recreation system with a variety of recreational opportunities within the parkway. Connect the multipurpose trail with other local and regional trails and bikeways originating in surrounding areas. Do not construct a trail or canoe facilities downstream of Highway 99 unless warranted by recreational demand and in response to identified needs in managing indiscriminate activities.
- 4. Unify parkway elements into a recognizable unit and a visually integrated park system.

Policies:

1. Rehabilitate and improve existing recreation areas and facilities, particularly Lost Lake and Skaggs Bridge Regional Parks, on a priority basis.

- 2. Acquire, through purchase, easements, or other mutually satisfactory transactions, land for recreation areas and the expansion of existing parks and recreation areas.
- 3. Minimize potential impacts to sensitive natural resources by concentrating proposed recreation facilities and areas near or adjacent to existing parks or recreation areas whenever feasible.
- 4. Provide visitor services at levels compatible with the environmental resiliency and aesthetic setting of the recreation area. The types of uses to be accommodated at publicly operated recreation areas shall be limited mainly to hiking, jogging, bicycling, swimming, canoeing, picnicking, fishing, golfing, equine riding, nature observation, nature study and educational/interpretive programs, camping (tent, trailer, and RV), and supporting retail. Existing playgrounds and turf areas for informal play should be retained, and expanded if warranted by demand.
- 5. Except for turf, use native plant species for landscaping and vegetation restoration.
- 6. Physically control access with gates and collect user fees to support parkway operations and deter indiscriminate activities. Manage high-demand parkway uses through permits or additional fees as needed.
- 7. Separate recreational areas from residences by a buffer at least 150 feet wide and, if possible, screening vegetation as well.
- 8. Have rangers and other parkway personnel prevent and control undesirable activities and unlawful conduct as their most important responsibility.
- 9. Whenever possible, avoid steep grades, environmentally sensitive areas, erodible soils, existing residences, agricultural operations, and hazards in the alignment and engineering of trails and bikeways. Provide separate surfaces for pedestrians, wheeled vehicles, and equestrians if feasible. Utilize existing trails and unimproved roads if appropriate. Make the multipurpose trail sufficiently wide to permit the passage of patrol, rescue, and maintenance vehicles. Provide a corridor for the multipurpose trail at least 100 feet wide and with vegetation planted as buffer/screening, whenever feasible.
- 10. Monitor all recreational activities that could have undesirable impacts on the river, wildlife, other visitors, and nearby residents and take action to minimize or control those impacts.
- 11. Establish uniform parkway facilities and sign standards.
- 12. Conduct interpretive programs as close as feasible to the site where the physical evidence of the theme being interpreted is found.
- 13. Use educational and interpretive curricula that will reach all segments of the community. Rely heavily on compatible programs already developed by volunteers, schools, and nonprofit organizations in the area.
- 14. Pave with asphalt or concrete, or use gravel or other permeable surfacing, depending on the likelihood of soil erosion and the water quality or groundwater recharge needs of the particular area selected for vehicle parking, an access road, etc.

MINERAL RESOURCE ELEMENT

Goals:

- 1. Assure that the reclamation of land after removal of sand and gravel deposits is planned for in ways that will enhance or complement the parkway and its natural resources and recreational opportunities.
- 2. Assure that parkway facilities are designed, constructed, and operated in such a way that sand and gravel mining operations are not adversely affected and that they will not preclude future extraction in all MRZ-2 designated areas.

Objectives:

- 1. Develop a consistent approach among the jurisdictions to permitting, reclamation plan requirements, and reclamation monitoring such that owners of sand and gravel resources maintain the ability to mine them, if they choose.
- 2. Develop a consistent approach to defining land uses that are inconsistent with or can interfere with mining operations and to setting standards for processing sites and haul routes.

Policies:

- 1. Site parkway structures with long economic life (e.g., a restroom) where they will not preclude or interfere with future mining operations. As needed, pending the future initiation of mining operations, construct temporary facilities that do not represent a significant economic commitment and can be readily relocated, such as unpaved trails.
- 2. Site trails/bikeways and other recreation areas at least 300 feet from the edge of active mining operations and separate them by physical barriers; avoid trail/bikeway crossings of active haul routes whenever possible; if crossings of haul routes are necessary, separate where feasible.
- 3. Augment state reclamation guidelines as needed for the parkway to protect existing riparian woodlands, enhance or complement the revegetation of the wildlife corridor and adjacent areas, improve lakes as parkway features by providing for specific wildlife habitat needs or replication of natural landscapes, and reflect public safety needs.

PLAN IMPLEMENTATION ELEMENT

Land Acquisition

Goals:

- 1. Establish natural reserves and recreation areas in conjunction with a continuous wildlife corridor and trail system.
- 2. Meet parkway and landowner needs on mutually acceptable terms.

Objectives:

- 1. Acquire undisturbed or fragile land suitable for the wildlife corridor or a natural reserve before acquiring previously disturbed land for restoration of vegetation or for a recreation area.
- 2. Make the most effective use of limited public funds.
- 3. Protect existing development entitlements in a manner that retains property values while meeting parkway objectives.

Policies:

- 1. Make purchases of full fee title (as well as easements and other alternative land transactions) on the basis of a willing seller only and an offer of fair market value or other mutually satisfactory terms.
- 2. No land shall be acquired for the parkway by the managing entity, the proposed San Joaquin River Conservancy, by the exercise of eminent domain.
- 3. In choosing among lands available from willing sellers and for which acquisition funding is available, acquire land and water areas for habitat protection before acquisitions for recreational uses.
- 4. Seek donations, facilitate land exchanges, and create mitigation banks whenever possible to minimize expenditures of public funds. Attempt to acquire a real property interest (e.g., easement or option) that is available at a cost less than the full fee purchase, if acceptable to the affected landowner. However, in most instances when the land to be acquired is planned for intensive recreational use or the protection of especially fragile natural resources, the full fee interest should be purchased.

Managing Entity

Goal:

Establish a new managing entity that can provide a consistent, coordinated approach to parkway land acquisition and management in ways that meet community goals for the parkway.

Policies:

- 1. A majority of the new managing entity's governing board should be locally appointed residents and public officials of the Fresno-Madera metropolitan area. The membership of the governing board should include agencies that own and manage land in or near the parkway.
- 2. The administrative jurisdiction of the managing entity should include all areas of the parkway it acquires by purchase, lease, easement, etc.; operates on behalf of other public agencies; or manages for a private entity under a voluntary arrangement. Its territory (in which an election for a bond issue or tax would be conducted by the participating local governments) would consist of the parkway service area, i.e., the urbanized or urbanizing areas of Fresno and Madera Counties that are less than one hour's driving time from the parkway. Predominantly rural areas in western Madera County and southwestern Fresno County and from the foothills to the crest of the Sierra Nevada would be excluded.

- 3. The managing entity shall have the authority to acquire interests in land itself or in cooperation with other public agencies, construct facilities, undertake site improvement projects, and mange, operate, administer, and maintain the parkway.
- 4. The managing entity should have no authority to control land development through zoning, specific plan approvals, or other land use authority, which is reserved to cities and counties.
- 5. Decisions on financing the capital outlay and operational needs of the parkway will be made by a combination of the voters of the region, local government, the managing entity, state government, and other public agencies and private entities with interest or jurisdiction in the parkway. Local government would retain its authority to seek voter approval of a proposed bond issue or local tax.

OTHER LAND USES

Agriculture

Objective:

Protect agriculture (crops, livestock, orchards, and ornamental trees) in the parkway if feasible.

Policies:

[No change or addition to existing policies proposed.]

Commercial

Objective:

[Commercial uses are not designated in the parkway plan. The following policy is provided, however, to guide the provision of commercial services in ways that are compatible with the parkway.]

Policy:

Provide commercial activities needed to serve parkway visitors, such as sales of food and beverages, camper's grocery items, and books, guides, and educational materials, under special use permits and consistent with the other objectives and policies applicable to the parkway.

Public Service Facilities

[The provision of public service facilities is beyond the scope of the parkway plan. The following policy is provided, however, to guide the provision of public service facilities in ways that are compatible with the parkway.]

Policy:

Furnish necessary public service facilities (water, electricity, telephone) on land currently supporting a public service facility and other land needed for development of those facilities if considered necessary for the health, safety, and welfare of the people of the area. Do not furnish public service facilities in areas with native vegetation or sensitive wildlife breeding or nesting habitat.

Chapter 3
Natural Resources



DESCRIPTION of NATURAL RESOURCES

VEGETATION

Survey Methods

Data regarding botanical resources present within the riverbottom were obtained through three procedures: literature review, personal communication, and field reconnaissance. Several reports have been prepared which discuss natural resources of this stretch of the San Joaquin River (The Planning Center 1989a, 1989b; counties of Madera and Fresno, City of Fresno 1986; California State University, Fresno 1990). The biological technical appendix for the Ball Ranch Specific Plan Environmental Impact Report, while not discussing the whole of the river under consideration in this planning process, provided much detailed information. In addition, input from local resource agencies and persons knowledgeable about the river was solicited and incorporated into this report. These persons included, but were not limited to, members of the Sierra Club, Audubon Society, and California Native Plant Society. Lastly, an aerial survey of the riverbottom was performed on June 13, 1991.

Floral nomenclature follows Munz (1968), while plant community classification follows that established by the California Natural Diversity Data Base (Holland 1986), with modifications as necessary to conform with observed communities. Information regarding the sensitivity of species and communities is based upon Smith and Berg (1988) and the California Natural Diversity Data Base (1988).

Vegetation Communities

Eight plant communities were identified within the boundaries of the San Joaquin River Parkway project: Great Valley cottonwood riparian forest, (Great Valley) cottonwood-willow riparian forest, Great Valley mixed riparian forest, Great Valley oak riparian forest, valley oak woodland, Great Valley willow scrub, coastal and valley freshwater marsh, and nonnative grassland. All of these communities, with the exception of nonnative grassland, are considered to be sensitive due to significant losses in area throughout their ranges. Developed areas, sand and gravel operations, aquaculture, grazing, orchards, vineyards, and other agriculture are also present within the project boundaries.

Great Valley Cottonwood Riparian Forest. This community is composed of broad-leafed, winter-deciduous tree and shrub species. Dominant species present in this forest community are Fremont cottonwood (*Populus fremontii*), and black willow (*Salix gooddingii*), along with other species of willow. Young Fremont cottonwood and black willow are also represented in the subcanopy layer along with button-willow (*Cephalanthus occidentalis*), blackberry (*Rubus procerus*), mule fat (*Baccharis viminea*), and the exotics tamarisk (*Tamarix* sp.) and tree-tobacco (*Nicotiana* sp.). Herbs are most often limited or absent from these densely canopied stands. Great Valley cottonwood riparian forest is typically found on fine-grained alluvial soils which develop along perennial streams. In winter, these sites are typically inundated and often experience annual flood disturbances. Hydrologically, subsurface drainage may be adequate to support this association when the adjacent streambed is dry.

(Great Valley) Cottonwood–Willow Riparian Forest. This plant community is very similar to cottonwood riparian forest, and could actually be considered a phase which is characterized by dense stands of willow species, principally black willow. Shrub layers are generally poorly developed and structural diversity is low indicating that most stands are even-aged. This results in habitat values which are generally less than that of other woody riparian habitats. Cottonwood-willow riparian forest is found in conjunction with cottonwood riparian forest on fine-grained alluvial soils along the streambed having similar ecological requirements.

Great Valley Valley Oak Riparian Forest. This riparian forest is winter-deciduous and dominated by valley oak (*Quercus lobata*), although Fremont cottonwood, black willow, and

western sycamore (*Platanus racemosa*) can also be well-represented. The understory of valley oak riparian woodland is composed of a number of species including young Fremont cottonwood, valley oak, and black willow, along with red willow, lance-leaf willow, Oregon ash, blackberry, and western virgin's bower (*Clematis ligusticifolia*). The herb layer contain species representative of the nonnative grassland community. Large trees, especially oaks, provide roosting and nesting opportunities for a large number of bird species, particularly raptors. This community develops on the highest portions of the floodplain as it is less tolerant to the kinds of natural hydrological disturbances which occur along active streambeds. It is also more tolerant of dry summer conditions, however, it still requires some annual nutrient input in the form of silty alluvium and sub-surface irrigation. Great Valley valley oak riparian forest transitions into a valley oak savannah community with increasing distance from the river, and canopy and shrub cover decrease.

Great Valley Mixed Riparian Forest. This plant community is characterized by a mixed canopy composed largely of Fremont cottonwood, black willow, valley oak, western sycamore and red willow. Oregon ash (*Fraxinus latifolia*) and lance-leaf willow (*Salix laevigata*) are found in limited amounts. The shrub layer is well-developed in this community and includes California wild grape (*Vitis californica*), blackberry, button-willow, elderberry, and sandbar willow. Stands of Great Valley Mixed Riparian Forest have the highest structural and floristic diversity of all woody riparian vegetation types and are of great value to wildlife. The community is generally found on relatively fine-textured alluvium back from the active river channel. These sites experience overbank flooding which include abundant alluvial deposits and groundwater recharge.

Valley Oak Woodland. Valley oak woodland is also a winter-deciduous community. It is dominated by valley oaks (often to the exclusion of all other tree species) which form a fairly open canopy rarely exceeding 40% cover. The understory layer consists of herbaceous species similar to those present in nonnative grassland. This community is found on deep, well-drained alluvial soils. Valley oak woodland and its understory provide both nesting and foraging opportunities for raptors.

Great Valley Willow Scrub. Willow scrub is a broad-leafed winter-deciduous community characterized by dense shrubby stands of black, lance-leaf, and sandbar willows, with black willow being dominant. Understory associates include mule fat and button-willow along with an herbaceous layer of forbs and grasses. It is distributed throughout the San Joaquin River in areas subject to recent or continuing disturbance. Willow scrub is often the first community to colonize mining depressions and developing sand bars, and is also found as patches within riparian forest communities.

Coastal and Valley Freshwater Marsh. These marshes are dominated by perennial emergent monocots which may reach five meters in height. These communities require hydrologically quiet sites which are permanently flooded with fresh water. Within the project area, freshwater marshes are commonly associated with sand and gravel ponds. Characteristic species include sedge (*Carex* spp.), spike-rush (*Eleocharis* spp.), umbrella sedge (*Cyperus*), bulrush (*Scirpus*), cat-tail (*Typha*), marsh pennywort (*Hydrocotyle verticillata*), and common reed (*Phragmites australis*).

Non-native Grassland. Non-native grassland is often found as the understory of valley oak woodland habitat. It is dominated by annual grasses of the genera *Avena*, *Bromus*, *Festuca*, and *Hordeum* and, in years of favorable rainfall, numerous species of showy native annual wildflowers. This community is generally found on fine-textured clay soils.

WILDLIFE

Survey Methods

Information on wildlife species present within the San Joaquin River and adjacent riverbottom was obtained from a review of literature, including the San Joaquin River Reconnaissance Study

(Counties of Madera and Fresno, City of Fresno 1986) and the San Joaquin River Parkway and Environs Conceptual Plan (SJRPCT 1989), and discussions with residents of the area, local resource agency personnel, biologists, and environmental groups.

Wildlife Communities

The San Joaquin River and adjacent riverbottom provides a wide diversity of wildlife habitats within a relatively confined area. This habitat diversity, in conjunction with the lack or loss of habitat diversity in surrounding areas, has resulted in a concentration of wildlife species close the river. The presence of year-round water in a relatively arid region also is a great attractant to wildlife. Areas along the river which support riparian/wetland vegetation and open water serve as resting oases for many migrating bird species, including waterfowl, passerines, and raptors. At least 250 species of wildlife have been documented to use the river and adjacent areas on a year-round or seasonal basis (Counties of Madera and Fresno, City of Fresno 1986; SJRPCT 1989).

Common waterfowl species found along the river, at least during certain times of the year, include Canada goose (*Branta canadensis*), wood duck (*Aix sponsa*), mallard (*Anas platyrhynchos*), northern pintail (*Anas acuta*), American wigeon (*Anas americana*) and cinnamon teal (*Anas cyanoptera*). Several species of waterfowl are known to nest in the wetlands along the river, including the wood duck (Winter, pers. comm. 1991).

Raptors are also an important wildlife component of the San Joaquin River system. Twenty-two species have been documented to use the river and surrounding environs (SJRPCT 1989). The close proximity of riparian and oak forests, which serve as nesting and roosting habitat, and low shrubland, agricultural land and grassland, which serve as foraging habitat, are a very favorable habitat combination for raptors. Raptors known to breed along the river include great-horned owl (Bubo virginianus), red-tailed hawk (Buteo jamaicensis), red-shouldered hawk (Buteo lineatus), and American kestrel (Falco sparverius) (The Planning Center 1989b). The black-shouldered kite (Elanus caeruleus) and osprey (Pandion haliaetus) have also been observed along the San Joaquin River during the spring season, and may also be nesting. Prairie falcons (Falco mexicanus) are known to breed on Little Table Mountain, adjacent to the river, and forage along the river and adjacent areas (Winter, pers. comm. 1991). A small bald eagle population (Haliaetus leucocephalus) winters at Millerton Reservoir and forages along the river, and an individual has been observed roosting in the large trees along the river channel in the vicinity of the Ball Ranch (The Planning Center 1989b).

A resident mule deer herd is present within the riverbottom, and individuals have been observed between Friant and Fig Garden Golf Club as well as at the Milburn Unit of the DFG's San Joaquin River Ecological Reserve. Most activity is likely between Friant and Highway 41, as this area supports the best habitat. At least portions of this herd regularly move in a ravine between the river and Little Table Mountain. This movement corridor is also likely used by larger mammalian predators such as bobcat (*Felis rufus*), coyote (*Canis latrans*), and mountain lion (*Felis concolor*). Mountain lion were detected in the riverbottom early in the winter of 1991.

Populations of small mammals dominate in the grasslands. These populations are a food source for predator species in the riverbottom.

The riverbottom provides roosting and foraging habitat for a number of bat species. The presence of large ponds, in combination with the abundance of insect life, represents excellent foraging habitat for many bat species. Brazilian free-tailed bats (*Tadarida brasiliensis*) and at least two species of myotis (*Myotis* sp.) have been observed to roost in significant numbers (100 – 200) under the North Fork Road (Madera County Road 206) bridge near Friant. The western mastiff bat (*Eumops perotis*) roosts on granite faces on nearby Little Table Mountain and may use the riverbottom for foraging. The western pipistrelle is also known to forage over the ponds in the riverbottom (Lockwood, pers. comm. 1991).

Beaver (*Castor canadensis*) occupy most reaches of the river, especially near Rank Island and the Milburn Unit. A number of reptile and amphibian species are also common components of the riverbottom wildlife community (SJRPCT 1989).

In the past, the San Joaquin River system supported king salmon (Oncorhynchus tshawytscha) and steelhead trout (Oncorhynchus mykiss) populations. However, due to river channel alterations and water diversions these species no longer naturally occur (Reynolds et al. 1990). Common native fish species present in the river system and associated ponds include hardhead (Mylopharoden conocephalus), rainbow trout (Salmo gairdneri), Sacramento squawfish (Ptychoceilus grandis), and Sacramento sucker (Catostumus occidentalis). Introduced species include largemouth (Micropterus salmoides) and smallmouth bass (Micropterus dolomieui), green sunfish (Lepomis cyanellus), bluegill (Lepomis macrochirus), mosquitofish (Gambusia affinis), crappie (Pomoxis spp.) and channel catfish (Ictalarus lacustris) (Counties of Madera and Fresno, City of Fresno 1986; SJRPCT 1989).

The California Department of Fish and Game operates the San Joaquin Fish Hatchery at Friant and stocks rainbow trout in the river between Friant and Lost Lake. The San Joaquin River supports both a warm water and a put-and-take cold water fishery. The cold water fishery is confined to the portion of the river between Friant Dam and Highway 41 because of water temperature restrictions (SJRPCT 1989). Water flow rates down the river channel govern water temperature and determine the extent of the cold water fishery.

SENSITIVE SPECIES

Plants

Only one sensitive plant species, Sanford's arrowhead (Sagittaria sanfordii), is known to occur within the area of the proposed parkway. This perennial herbaceous aquatic species is a Category 2 candidate for federal endangered species listing and a plant about which more information is needed (Smith and Berg 1988). Its current known distribution is within Butte, Del Norte, Fresno, and Ventura Counties where it is found submerged in slow-moving or ponded waters of natural sloughs and irrigation ditches. Habitat conditions within the area under consideration for the parkway are suitable for this species although it does not have a historical record of occurrence within this portion of the river (Stebbins, pers. comm. 1991). It is, however, being planted in former sand and gravel mining areas (Stebbins ibid.).

Plant Communities

As previously mentioned, all of the riparian and wetland communities found within the riverbottom are considered to be sensitive by resource agencies and local conservation groups. This sensitivity is related to the alarming rate with which these communities have disappeared and their unquestioned value to wildlife. It has been estimated that only 1.5% of the historic acreage of the state's riparian habitat remains today; within the study area, only approximately 6% of the original habitat remains (Counties of Madera and Fresno, City of Fresno 1986). Numerous wildlife species are directly associated or dependent upon riparian habitats, including 43% of north American mammals, 38% of reptiles, 14% of amphibians, 77% of birds, and 75% of fishes (Counties of Madera and Fresno, City of Fresno 1986).

Additionally, areas of nonnative grassland adjacent to these riparian habitats provide foraging habitat for a number of bird species, some of which themselves are sensitive.

Wildlife

A number of wildlife species currently occur or have historically occurred within the boundaries of the proposed San Joaquin River Parkway that have regional or statewide significance, due to sensitivity to disturbance, past and/or continued reduction of habitat, and declining populations. The wildlife species discussed below, and their habitats, were given special consideration in

recommending natural reserve designations and human activity constraints within the proposed parkway.

Bald Eagle (Haliaetus leucocephalus). As previously mentioned, this species winters in the immediate vicinity of the San Joaquin River, at Millerton Reservoir. This federal- and state-listed endangered species has been observed roosting and foraging along the upper portion of the river between Friant Dam and Highway 41. Nineteen eagles were sighted during four, 5-day surveys during the winter of 1988-89 (The Planning Center 1989b).

Valley Elderberry Longhorn Beetle (Desmocerus californicus dimorphus). This insect species is found only in elderberry shrubs (Sambucus sp.), which are found within the riparian and oak woodland areas along the San Joaquin River. All areas supporting elderberry are considered sensitive and potential habitat for this species. This insect is listed as threatened by the federal government. Recent locations for this species or its habitat within the parkway boundaries include Rank Island, the Boy Scout Camp, Fresno County Sportsmen's Club, Riverside Municipal Golf Course, the Ball Ranch, and the vicinity of the Highway 41 crossing (The Planning Center 1989b; Halstead, pers. comm. 1991).

Great Blue Heron (Ardea herodias). A large heron rookery currently exists on Rank Island. In 1989, 101 occupied nests (including both herons and great egrets) were counted within this rookery (Winter, pers. comm. 1991). The nests are concentrated in the tops of sycamore trees in the immediate vicinity of the river channel, thus making them susceptible to disturbance by canoeists and boaters. Herons are protected by the Migratory Bird Treaty Act, and rookeries are considered Areas of Special Biological Importance by the State of California (SJRCP 1989).

Canada Goose (*Branta canadensis*). Canada geese winter at Millerton Reservoir and on some of the ponds along the San Joaquin River. Historically, the Ball Ranch area has consistently supported wintering geese because of the presence of both ponds and grain fields. The size of the winter population along the river is greatly determined by the available forage in surrounding agricultural lands. As more appropriate forage (e.g., com) is available, more geese remain throughout the winter months. These birds are protected by the Migratory Bird Treaty Act.

Yellow-billed Cuckoo (Coccyzus americanus occidentalis). This state-listed endangered species was last recorded to have nested within the boundary of the proposed parkway in the early 1950's, approximately one-half mile east of Highway 41 (Winter, pers. comm. 1991). Loss of wide expanses of dense willow scrub habitat and human disturbance have eliminated cuckoos from the riverbottom. However, this species was observed nesting in riparian scrub in a canal near the Fresno Air Terminal in 1989 (Winter, pers. comm. 1991), indicating that this bird could potentially recolonize and use the river for breeding if habitat is restored.

Swainson's Hawk (*Buteo swainsoni*). The Swainson's hawk is a State of California threatened species and a federal Category 2 candidate species for listing. This raptor has become increasingly rare throughout its range due to loss of riparian habitat (used for breeding), conversion of foraging habitat to incompatible agricultural uses, and pesticides (Remsen 1979). There are no recent records of Swainson's hawk breeding activity along the San Joaquin River, however, the birds are observed in wintertime during migration. In the winter of 1989, a flock of 100 birds was seen flying and roosting along the riverbottom (Winter, pers. comm. 1991).

San Joaquin Pocket Mouse (*Perognathus inornatus*). This species is a federal Category 2 candidate species for listing. It inhabits grassland and oak savannah habitats in the Central Valley. Past records show that this rodent was found in the vicinity of the Highway 41 bridge and the town of Friant, but the records may indicate a bluff-top location instead of in the riverbottom (SJRPCT 1989). However, a pocket mouse was trapped on two occasions in 1989 in grassland habitat on the Ball Ranch (The Planning Center 1989b).

Molestan Blister Beetle (*Lytta molesta*). This insect is a federal Category 2 candidate species for listing. This species is found only in the Central Valley, commonly on mesic soils near flowering

plants. One record for this species exists within the parkway corridor near the Highway 41 bridge (Halstead, pers. comm. 1991).

NATURAL RESOURCE ELEMENT of the PARKWAY PLAN

This parkway plan has a number of elements that would directly or indirectly affect the natural resources within the proposed parkway. The following discussion outlines the goals and proposed features of the parkway that will promote the long-term preservation, enhancement, and appropriate public enjoyment of the plant and wildlife resources of the San Joaquin River and the adjacent riverbottom.

NATURAL RESERVES

The parkway plan proposes to establish a large natural reserve along the river between Friant and the Highway 41 crossing. The area would encompass Ledger Island, Rank Island, portions of the Ball Ranch, and the Willow Unit of DFG's San Joaquin River Ecological Reserve. This segment of the river represents the best wildlife habitat currently extant within the proposed parkway, in terms of extent, quality, and habitat diversity and deserves special consideration and protection. Efforts should be made to acquire the greatest extent of land and water areas possessing these habitat values along both sides of this reach of the river. There is also the potential to expand this reserve through vegetation restoration programs and the purchase of adjacent natural lands and lands with restoration potential.

The diversity of habitat types within this portion of the river floodway is high, and includes river channel, riparian woodland, grassland, oak woodland, pond, and freshwater marsh. Important wildlife resources known to inhabit this area include numerous raptors (both breeding and roosting), including roosting and foraging bald eagles (The Planning Center 1989b), a great blue heron/great egret rookery, breeding ducks, wintering Canada geese, mule deer, bobcat, coyote, San Joaquin pocket mouse, and potential valley elderberry longhom beetle habitat. Many other migratory waterfowl and passerine birds make use of this habitat on a seasonal basis.

Other natural areas along the riverbottom also have high wildlife values. Downstream, the Milburn Unit of DFG's San Joaquin River Ecological Reserve will be restored and managed for fish and wildlife. Other areas – predominantly those with riparian vegetation or restoration potential – should be acquired for inclusion in the wildlife corridor.

WILDLIFE CORRIDORS

One important goal of the parkway plan is to maintain, enhance, or restore native vegetation for wildlife along the entire 32 miles of the river between Friant Dam and the Highway 145 crossing. For the long-term viability of the wildlife populations in the river valley, as well as the viability of the riparian/wetland communities, it is important to provide continuous habitat in movement corridors for wildlife. Fragmented habitat islands are often inadequate to support many species in perpetuity, and the lack of appropriate natural vegetation between these islands can act as barriers which block plant and wildlife dispersal and recolonization of previously occupied habitat.

The parkway plan proposes to create new wildlife habitat to connect areas of natural vegetation currently separated by sand and gravel operations or other development activities. These habitat connections will be accomplished through an active vegetation restoration program, using appropriate local plant species. In some areas along the river, where the width of the riparian vegetation is narrow (e.g., less than 200 feet), it is recommended that the width of the wildlife corridor be increased to a minimum of 200 feet on both sides if feasible from topographic and hydrological standpoints.

Wildlife corridor connections need to be reestablished between riparian habitat ending east of Highway 41 and the Fig Garden Golf Club to the west. Past sand and gravel mining operations have created many large ponds between Highway 41 and the golf course, with the resultant removal of most native vegetation. These ponds offer a significant barrier to many wildlife species, and reestablishing viable riparian habitat around these ponds would significantly enhance wildlife resources along this portion of the parkway.

A much smaller habitat gap (approximately 1,500 feet) exists along the river west of Highway 99, just south of an old dirt landing strip on the Madera County side of the river, and is recommended for vegetation restoration to reestablish the continuity of the wildlife corridor.

There are some portions of the currently existing riparian corridor within the river system that would increase wildlife habitat values if the riparian corridor were widened and a number of places where mining or agricultural activities have reduced the extent and ecological value of natural vegetation. These areas have potential for restoration purposes. By increasing the width of the riparian corridor, not only is more wildlife habitat provided, but the increase in vegetation will act as a buffer zone to human-caused disturbances, which may allow wildlife species that are more sensitive to human activity to reoccupy these areas.

It is recommended that riparian vegetation restoration be carried out along the Madera County side of the riparian corridor between Ledger Island and the North Fork Road (Madera County Road 206) crossing, or that steps be taken to enhance opportunities for the corridor to revegetate on its own. A 100-foot increase in width is recommended beyond the current riparian boundary. In areas where no riparian vegetation remains along the river bank, a 200-foot band of riparian vegetation is recommended to be reestablished to the maximum feasible extent. Revegetation along the Madera County side of the corridor is especially important in areas where significant recreational activity is expected on the corresponding Fresno County side of the river, Lost Lake Regional Park being a prime example. This additional habitat will act as a refuge from the effects of human activity on the Fresno County side.

Additional width of habitat would also be a benefit to wildlife in the narrow riverbottom west of Highway 99. Because of the narrowness of the river channel along this portion of the river, significant increases in corridor width may not be possible. Hydrological studies outlining location of the water table and flood control requirements will be needed to adequately assess revegetation possibilities along this part of the riverbottom.

The reestablishment of grassland or oak-savannah habitats in certain locations can also act as important elements in enhancing the wildlife corridor, as well as provide additional valuable wildlife habitat and increased habitat diversity. These habitat types would be appropriate in upland locations where riparian vegetation would be inappropriate.

One other important wildlife corridor that should be preserved and possibly enhanced is the one between the San Joaquin River and Little Table Mountain. This corridor, which is in a large ravine on the Madera County side of the river opposite the Ball Ranch, is a route of movement for large mammals (e.g., mule deer, mountain lion, coyote, etc.) between the river and Little Table Mountain. Preservation of this corridor will greatly increase the potential for maintaining healthy populations of these valuable wildlife species within the parkway. A minimum of 300 feet of natural vegetation is recommended to be maintained in this ravine up to the blufftop. Providing for revegetation may be necessary to enhance cover in this corridor.

HABITAT CREATION, RESTORATION, and ENHANCEMENT

Wildlife habitat creation, restoration, and enhancement is a major goal of the parkway plan. Hydrological studies will be necessary to determine water table depths to assess where riparian vegetation can be sustained. In areas of past sand and gravel mining activities, recontouring of the riverbottom could enhance the value to wildlife by creating upland areas adjacent to riparian zones as well as increasing the total area available for planting riparian vegetation. Future mining

operations will create new ponds, which can be contoured to better suit the needs of wildlife. Ponds with varying depths can be created with the cooperation of the mine operators. By leaving some areas of ponds shallow in depth, freshwater marsh habitat can be established, which will greatly benefit many wildlife species, especially waterfowl and shorebirds. The shallow portions of these ponds will provide foraging habitat and cover for these species.

Pond locations proposed for habitat creation include the ponds between Highway 41 and Fig Garden Golf Club (to create a wildlife corridor as well as habitat), future ponds that likely will be created in the vicinity of, and incorporated in, Lost Lake Regional Park and Woodward Park, and a number of existing ponds scattered along the riverbottom between Highways 41 and 99.

Waterfowl are an important wildlife component of the San Joaquin River, especially Canada geese. Depending upon available food, a number of geese (perhaps 200) regularly winter at Millerton Reservoir and along the river. These geese often forage in the surrounding agricultural lands during winter months, and the availability of this supplemental food source likely governs the number of birds that remain throughout the winter. Many other waterfowl use the riverbottom as a rest stop during spring and fall migrations. The creation of new ponds, with associated wetland vegetation, will benefit geese and other waterfowl. In addition it is recommended that areas be set aside within the parkway for the creation of foraging habitat for geese and other waterfowl. This would entail creation of small plots of com in relatively open areas, where good visibility allows geese to avoid predators. One potential area is along the border of the Willow Unit, where approximately 10 acres of com would be necessary to support 200 geese through the winter. More acreage (20-40 acres) would be needed if the crop was commercially harvested and just the remnants of the crop left for the geese (Rempel, pers. comm. 1991).

The upper canopy component of the riparian habitat along the river between Highways 99 and 145 has been removed. It is recommended that this habitat component (i.e., tall oaks, cottonwoods, sycamores) eventually be reestablished to provide roosting and nesting habitat for raptors and other bird species.

A key component of a habitat creation and restoration program would be the control and removal of exotic plant species from those areas of the parkway set aside for their wildlife habitat values. Non-native plant species often displace native species and disrupt the natural plant community structure. This often results in a decrease in wildlife utilization. Cuttings and seeds necessary to implement a vegetation restoration program should, as much as possible, be taken from plant species indigenous to the riverbottom.

BUFFER ZONES and ADJACENT LAND USES

Buffer zones between human activity and wildlife habitat are a key component of the parkway plan that will allow multiple uses of parts of the riverbottom and still provide protection for wildlife species. No one buffer zone width is appropriate for all human-wildlife interactions. Zone width is dependent upon the sensitivity to disturbance of the wildlife species present, the type of vegetation within the buffer zone (e.g., tall vegetation that acts as a noise and visual screen), and the type and intensity of the adjacent human activity.

Available data indicate that more sensitive wildlife species such as roosting bald eagles and nesting great blue herons require up to 250 meters of buffer zone to ensure that they are not significantly disturbed (Stalmaster and Newman 1978; Werschkul, et al. 1976). This buffer distance can be reduced if native vegetation is present to screen wildlife visually from human activity, and if the adjacent activity is relatively benign (e.g., hiking). Other wildlife species may be more tolerant than eagles and herons, and may adapt to the presence of humans (White and Thurow 1985; Freddy et al. 1986). Table 3-1 outlines initial recommendations for buffer zones for wildlife habitat in relation to potential adjacent land uses and recreational activities. Actual delineation of buffer zones will be based on site-specific investigations of vegetation characteristics, the sensitivity to disturbance of species present in the area, topography, and adjacent land uses.

Table 3-1
Recommended Buffer Zones for the Protection of
Wildlife Habitat (Natural Reserves and Wildlife Corridors)

	Adjacent Land Use						
Buffer Zone Width (feet)	Passive Recreation ¹	Intensive Recreation ²	Agriculture/ Pastureland	Sand & Gravel	Low Density Housing <1/20 acres	High Density Housing >1/acre	Business/ Industry
100			X				
150	X				X		
300		X		X			
600						X	X

Hiking, biking, horseback riding, or golf.

Habitat within buffer zones established to protect riparian or wetland habitat should, in most instances, be native upland vegetation such as grassland or valley oak woodland. In some instances, additional riparian vegetation may be planted to establish a buffer zone, but its value to wildlife should not be equated, in terms of wildlife value and preservation, to that of the habitat the buffer zone is created to protect. Other semi-natural features such as golf courses, pasture, or low-intensity agriculture may in some instances be incorporated into buffer zones and may constitute an improved use of a previously degraded area. However, in the cases of agriculture and golf courses, pesticides, herbicides, and fertilizers, if used inconsistently with environmental protection laws and regulations, could reduce the suitability of these land uses as buffers because of potential negative impacts to wildlife and water quality. The golf course construction phase may also constitute a significant negative impact itself. The potential impacts of specific project proposals should be carefully addressed in the environmental review process.

Priority for sites to be revegetated with riparian habitat should go to areas to establish and enhance wildlife habitat and corridors. Because riparian vegetation restoration can be expensive and time consuming, creating buffer zones of this community type should be done selectively, after restoration sites have been established. Areas that would benefit from establishment of taller and denser riparian habitat in a buffer area are those locations where trails approach important wildlife habitat. This vegetation can act as a visual and noise screen between people and wildlife, thus enhancing the quality of the habitat. It is recommended that in most instances only passive recreation be allowed in wildlife habitat buffer zones.

Where low density residential uses or passive recreational activities in the parkway adjoin wildlife habitat, there should be a minimum 100-foot wide buffer zone and an additional setback zone or area without structures that is not less than 50 feet wide. The setback zone could be used for compatible landscaping, patio, or parking uses, but not a building. Where the 100-foot buffer plus 50-foot setback approach is not feasible, an offsetting expansion of the corridor width on the opposite shore should be a priority.

² Large concentrations of people camping, fishing, or picnicking; boat launching areas.

Figure 3-1 schematically represents the wildlife corridor and buffer zone in a typical section of the river.

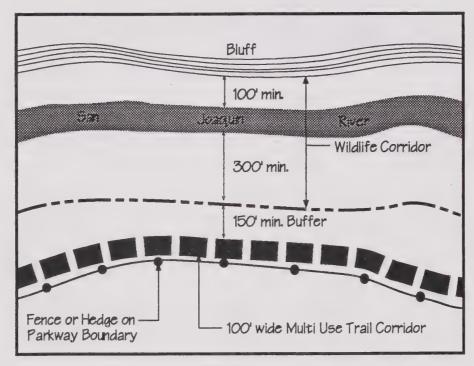


Figure 3-1

One potential impact to wildlife that may not be able to be buffered by distance is canoe traffic down the river. This could have potential serious consequences to such sensitive species as bald eagles and great blue herons, which are active close to the river channel. These species will acclimate to low level human presence, provided it is predicable and nonthreatening. Commercial canoe rentals are incompatible, as they would tend to promote a higher level of human presence. The parkway managing entity as well as canoeist organizations should assume responsibility for educating the boating public about sensitive wildlife species encountered along the river.

Lighting associated with development in the riverbottom should be minimized, carefully planned, and regulated. Lighting should not be allowed in the vicinity of the wildlife corridor or a natural reserve, except where public safety necessitates it. In instances where lighting is necessary, it should be of the lowest practicable intensity and directed away from the corridor or reserve. The impacts of lighting can be further minimized by planting tall vegetation that acts as a screen between the light source and the corridor or reserve. Regulating lights by automatic timers will assure that they switch off when no longer needed.

FISHERIES

The proposed parkway plan would attempt to utilize a number of existing ponds, as well as new ponds resulting from sand and gravel mining operations, for recreational use, including fishing. The privately operated lakes on the Moen property and Lost Lake Regional Park and the adjoining river frontage, in particular, will continue to be major focal points for fishing. Existing and new lakes will be stocked with game fish, primarily warm water species.

To keep the proposed chain of ponds in an ecologically healthy state, they should be connected to the river whenever feasible. Without this connection, eutrophication may cause the ponds to

deteriorate. Connecting the ponds to the river poses some danger to the native fish species in the river, due to competition with stocked nonnative fish species, unless precautions are taken. One possible solution is the employment of a cobble dam barrier system, which would allow water to flow from the river through the ponds, but bar the exchange of fish species. Another alternative would be to pump water from the river to the ponds, and back to the river. A properly screened pumping system would not only bar the movement of fish but also allow aeration of the water, thus reducing the chances of eutrophication.

The California Department of Fish and Game is under state mandate to restore salmon and steelhead trout in the San Joaquin and Sacramento River systems (Salmon, Steelhead Trout, and Anadromous Fish Restoration Act [Chapter 1545, Stats. 1988]). How this mandate will be applied to the portion of the San Joaquin River within the proposed parkway boundaries has not been determined. Increased water releases would likely be necessary, as would river channel alteration and management. The feasibility of reestablishment of these anadromous fish species within the parkway area has not yet been determined. DFG does, however, consider this portion of the San Joaquin River potentially significant aquatic habitat.

MONITORING PROGRAM

The initiation of a natural resources monitoring program, to provide data on the status of the wildlife and plant communities within the parkway on an on-going basis, is strongly recommended as a priority undertaking for the parkway managing entity.

Monitoring will also be required to assess the status of revegetation for the health of the habitat and its use by wildlife species, and would also be used to measure the effectiveness of wildlife corridors. This program will be critical in assessing the impacts of recreation, sand and gravel mining, and other potential developments within the parkway. Some modifications in land use and recreational use may be necessary throughout the life of the parkway in order to insure the ecological health of the wildlife along the river. In particular, it may become necessary to restrict access to sensitive areas of natural reserves to escorted groups.

Since the San Joaquin River ecosystem is dynamic, the parkway plan needs to be recognized to have a considerable degree of flexibility as it is carried out over time. A monitoring program is the means by which changes in the ecosystem's status and health can be detected, which in turn will trigger any necessary corrective actions. It is recommended that the monitoring program be overseen by the managing entity to provide for consistency throughout the parkway. The managing entity should conduct this program in cooperation with DFG and other public agencies with natural resource protection responsibilities. The managing entity should provide expertise in natural resources monitoring on its own staff or by contract with appropriate public agencies or private entities.

IMPLEMENTATION of the NATURAL RESOURCE ELEMENT

LAND ACQUISITION for WILDLIFE HABITAT

Privately-owned parcels within the parkway that become available for acquisition should be prioritized as to their wildlife habitat value and restoration potential. An emphasis should be placed on acquiring parcels that consolidate areas of habitat or secure segments of the wildlife corridors. A piecemeal approach to land acquisition that results in preserving disjunctive islands of wildlife habitat should be avoided, as this is not an acceptable approach to ensuring the long-term viability of the wildlife community within the parkway. Initial acquisitions for wildlife habitat should concentrate in and around the key wildlife habitat preservation and restoration areas, especially Rank Island-Ledger Island-Ball Ranch-DFG Willow Unit, which collectively have the highest quality and most diverse habitat values; the area upstream of DFG's Milburn

Unit; and the riverbottom area between Highway 41 and Fig Garden Golf Club. Portions of these areas are already publicly owned, but most are not, and should be considered priority acquisitions.

BIOLOGICAL SURVEY

Detailed comprehensive baseline data on the natural resources within the proposed parkway is lacking. A thorough biological inventory and analysis is strongly recommended. This information will be necessary to evaluate habitat value for future land acquisition, for selection of revegetation sites, and for future environmental documentation and impact analyses required under CEQA. Another important reason for the inventory is to provide baseline data for the proposed biological monitoring program.

RIPARIAN VEGETATION RESTORATION PROGRAM

Riparian and wetland habitats represent a relatively small area in the semiarid and arid Southwest. In contrast to their relatively small area, they are of great importance in ecosystem function, support more diverse vegetation than the drier surrounding uplands, and provide a critical source of diversity. These habitats remove sediment from water as it moves through the vegetation, thereby purifying the water. Vegetation helps dissipate the energy of floodwaters while providing water, shade, and cover for fish and other aquatic organisms.

Habitat restoration and vegetation restoration programs are used as an important tool in the management and enhancement of riparian systems. In the past decade, a great deal of experience has been gained in project planning, propagation of native plants, site preparation, field planting techniques, water requirements, irrigation methods, and maintenance of plantings. Experimentation involving test plots and field trials has led to the development of fairly reliable methods for successful revegetation.

This plan proposes to restore and enhance areas of riparian and wetland habitats along the San Joaquin River. Many of these areas have undergone biological, physical, and hydrological changes which are primarily the result of human interference. Restoration and enhancement of this portion of the river is intended to increase habitat value and recreate a continuous wildlife corridor by creation of riparian habitat in some areas where it historically existed, enhancement of degraded riparian habitat, enhancement of pond edges with freshwater marsh species, and incorporation of buffers between all wildlife habitat areas and adjacent land uses.

The selection of which communities to create and their location will take into account the unique factors required for the creation of each habitat type. As the San Joaquin River once provided habitat for the least Bell's vireo, revegetation specifications for Great Valley cottonwood riparian forest, cottonwood-willow riparian forest, and Great Valley willow scrub will be modified from those used to create such habitat in southern California. In general, such habitat differs significantly in structure from non-vireo habitat, being wider and having a higher degree of vertical stratification. Dominants include willows, Fremont cottonwood, and mule fat in all cases.

Water Requirements

Water requirements for riparian revegetation programs can be divided into two phases: establishment and maintenance. More water is required during the initial phase (usually one or two years) to establish riparian habitat than is needed once the vegetation is established. This is often the case for horticultural plantings as well. Golf courses can require up to six times the amount of water during the establishment phase as compared to what is required for maintenance (Guinon, pers. comm., 1990). Water use is also typically higher during the summer months when the deciduous species are in leaf and the rate of evapotranspiration is greater. Supplemental water needs for maintenance will be less than establishment requirements but can be expected to continue for several years post-establishment.

For survival and establishment of riparian vegetation, the depth to groundwater should be between six and ten feet. The amount of water needed to sustain an acre of riparian habitat is more difficult to determine, being dependent upon a number of variables. Some data do, however, exist. Riparian vegetation along the Gila River was estimated to use 6.5 acre-feet per acre per year (USDI 1987). In estimating the amount of water necessary for the establishment and maintenance of least Bell's vireo-quality riparian habitat in San Diego County, Guinon (ibid.) estimated 8 acre-feet per acre per year and 5.8 acre-feet per acre per year, respectively. She also estimated maintenance water requirements for oak woodland habitat to be approximately 1.7 acre-feet per acre per year.

Vegetation Restoration Costs

In a statewide survey of 25 riparian vegetation restoration projects, Guinon (1989) found that costs ranged from \$1,625 - \$240,000 per acre. Typically, most projects were underbudgeted and a wide array of hidden costs significantly increased the final project cost. The lowest figure involved a project with an all-volunteer labor force and did not include the cost of project design, nursery facilities, maintenance, or monitoring. Even when these costs are estimated, they are usually not calculated at industry standard rates.

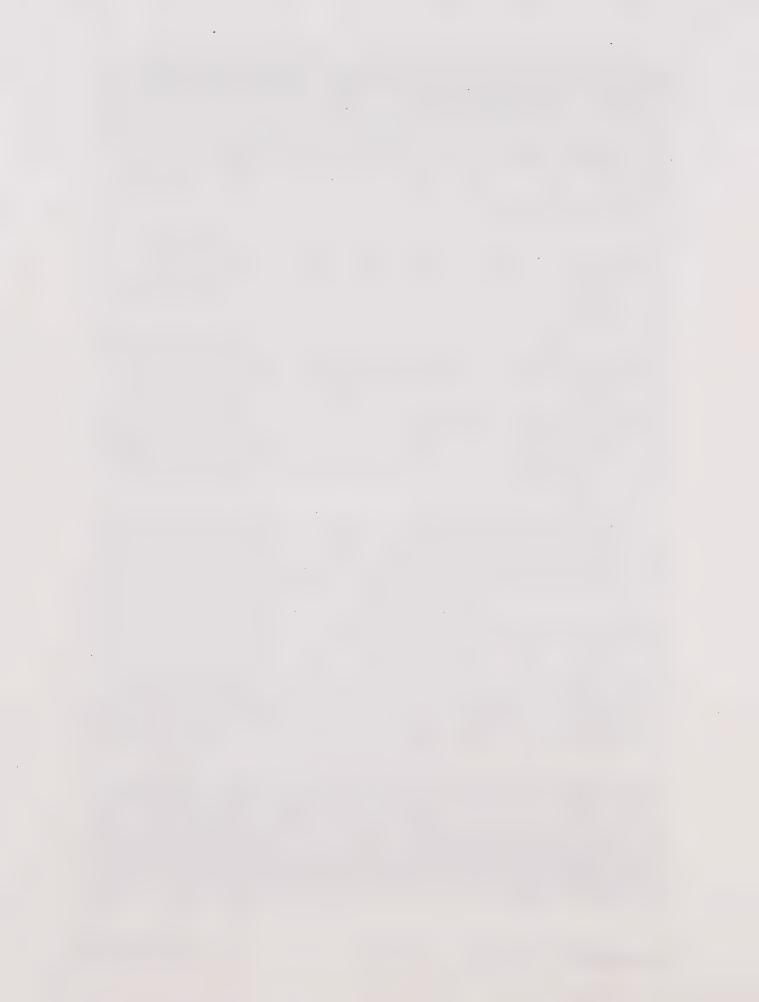
By contrast, the California Department of Transportation has spent upwards of \$250,000 per acre in efforts to revegetate sites in San Diego County with habitat suitable for the federally listed endangered least Bell's vireo. The high cost of the project was due to the extensive use of transplanted materials, which were used in an attempt to decrease the time necessary for the habitat to become functional. CalTrans' figure, however, also does not include some factors such as planning, design, maintenance, and monitoring. In the middle cost range, estimates for proposed creation of vireo habitat in Pomo Valley, San Diego County, provided a cost analysis of approximately \$50,000 per acre, which included plant materials, installation, establishment, maintenance, and irrigation, but not for land acquisition, long-term maintenance and monitoring, or water costs (Leedshill-Herkenhoff 1988). DPR estimates \$25,000 per acre for replanting riparian willow communities.

Vegetation restoration costs that would otherwise be incurred by public agencies could be reduced significantly if riparian areas along the San Joaquin River in need of vegetation restoration were to be used as mitigation sites for projects in the riverbottom or elsewhere that adversely affect vegetation communities that are comparable to the San Joaquin River environment. In these instances, the project proponent would bear those costs.

These examples demonstrate the difficulty in obtaining a reliable, generic per acre cost for revegetation projects. In essence, the real costs of vegetation restoration are quite high, but so are the ecological benefits of a well-planned program.

An effort has been made to estimate the initial costs of a revegetation project intended to create functional wildlife habitat. Specific costs such as planting materials (including hydroseed, container stock, and transplants) and irrigation materials have been estimated. Not included in this figure are project design, landscape architect fees, necessary land acquisition, site preparation, maintenance, or monitoring. Total costs per acre for these elements amount to approximately \$35,000 per acre; however, with large projects, economies of scale may reduce costs somewhat.

The cost of revegetation can be significantly reduced by allowing some disturbed areas to revegetate naturally in both riparian and upland areas, where the appropriate soils and hydrology either already exist or can be reestablished. Restricting access of humans and livestock to these areas is critical to their long-term success. Removal of competitive, non-target vegetation is also very important. The length of time it takes to reach a climax plant community can be much greater when revegetation is left to natural processes alone. However, when combined with areas of active vegetation restoration, this approach would have the advantage of producing a mosaic of plant communities at different successional stages. Such a diversity of habitats will promote a high diversity of wildlife species.



Chapter 4 Hydrology Review



Preface

The following is a review of the hydrology information available in several documents which provide analysis of various aspects of the San Joaquin River and the adjacent riverbottom. Determination of floodplains and water surface elevations for various storm events and under different assumptions about vegetation will require extensive data gathering and modeling which are beyond the scope of this summary report.

DESCRIPTION of HYDROLOGICAL RESOURCES

The following description is based upon information found in the San Joaquin River Parkway and Environs Conceptual Plan (2M Associates 1989) and The San Joaquin River Area Reconnaissance Study (Counties of Fresno and Madera and City of Fresno 1986).

The river area discussed in this section is approximately 32 miles long and is segmented by the state highway network into three reaches: a southwest-flowing section from Friant Dam to Highway 41; a section that turns westward just downstream from Highway 41 meandering toward Highway 99; and from Highway 99 to Highway 145, where the corridor narrows and is less prominent. The only significant tributary within this area is Little Dry Creek. The riverbottom close to the river is 80 to 100 feet deep with respect to the surrounding bluffs and foothills. The bluffs generally decrease in height farther downstream.

INSTREAM FLOWS

Water in the river channel is controlled mostly by the Bureau of Reclamation with releases from Friant Dam. Releases are controlled by the Bureau of Reclamation to satisfy downstream riparian water rights. These releases result in a live stream of at least five cubic feet per second (cfs) past Gravelly Ford, which is approximately six miles below Highway 145. From October through March, the region's rainy season, releases into the river are commonly less than 50 cfs because pumping demands are low and the flow past Gravelly Ford can be maintained with low releases. Major releases to the river may occur from March through May to make room in Millerton Reservoir for rainfall and snowmelt from upstream. Summer releases range from 200 to 250 cfs depending on downstream requirements. These flows are steadily reduced downstream due to the effects of pumping (2M Associates 1989). Typically, in order to maintain minimum flows at Gravelly Ford, the Bureau of Reclamation must keep flows at Highway 99 at 100 cfs and 60 cfs at Highway 145 (Duane Duncan, pers. comm., 1991).

WATER RIGHTS

Ownership of some of the water rights in the river area are in question. Several entities including the City of Fresno, both counties, as well as the U.S. Bureau of Reclamation claim to own groundwater rights in the area. A number of downstream water users have contractual rights to river flows and to a more limited extent groundwater. It is the opinion of the Bureau of Reclamation that surface water flowing within the San Joaquin River and within aquifers recharged by the river are owned by the Bureau of Reclamation. The Bureau in the late 1940's through the 1960's bought all but riparian water rights along the San Joaquin River below Friant Dam. Riparian water rights are defined as being limited to those individuals that can demonstrate historic use of river water in the late 1800's. The Bureau interprets this to mean solely agricultural use. However, the Bureau has granted an annual water allocation from Millerton Reservoir to the City of Fresno of 60,000 acre feet in connection with litigation that established that the construction of Friant Dam may have adversely impacted ground water levels downstream. Similar water rights may exist with the County of Madera (Counties of Madera and Fresno and City of Fresno 1986).

Parkway improvements and operations should respect and preserve private water rights and associated diversion structures and facilities.

BOATING

The river flows at all times; however, the flows are highly variable due to the variations in releases from Friant Dam and the fluctuation of runoff due to the variations in precipitation between the dry season and rainy season. During periods of low flow, the river channel is not easily boated. Ideal flows for recreational boating are between 200 and 500 cfs (2M Associates 1989). Even at 200 cfs, some sections of the river cannot be boated due to the channel configuration or heavy vegetation (Duane Duncan, pers. comm., 1991). At flood stage, the river is dangerous for boating.

Precise measurements of the flows required to sustain recreational boating and fishing have not been taken. Recreational boating (canoeing, fishing, etc.) requires water depths between six inches and two feet for most purposes. Higher depths are also possible depending upon the location of deep pools and other characteristics of the channel. Water rating curves should be developed at several locations along the river. These curves would compare depth of water to release flows in cubic feet per second at the selected locations. With this information, the quantity of water required to maintain adequate water depths for boating and other recreational activities, and the quantity of water required to maintain year-round boating flows could be determined. If this proves to require too much water, the releases could be timed for just 26 weekends per year or 8 weekends in the summer for periods in which flows would be augmented for recreational boating. More measurements would provide better planning figures (Ivar Plescov, pers. comm., 1991).

The Bureau of Reclamation is limited in its operation of the dam to flood control and irrigation; modification of the operation of the dam for recreation or navigation would require a new authorization by Congress. This could be a long process, requiring strong support from the local congressional delegation, but could result in the Bureau of Reclamation being authorized to operate Friant Dam in a manner more compatible with boating on the river.

The Madera Irrigation District has proposed utilizing the river channel to deliver water from Friant Dam downstream to pumping plants to be constructed either above or below Highway 99. Currently, this water is delivered through the Madera Canal, but up to 50 cfs could be routed through the San Joaquin River. If implemented, this could result in instream flow increases of up to 50 cfs from May through July from Friant Dam to Highway 99. However, the capital cost would be approximately \$1.2 million and the annual operations cost would be in excess of \$90,000. Since the Madera Irrigation District is willing to cooperate, but would not derive any economic benefit from this action, the capital and operational costs would have to be borne by another entity (Bob Stanfield, pers. comm., 1991). The managing entity proposed for the parkway or some combination of public agencies and private entities with recreational interest in the river should be considered as possible candidates for undertaking the responsibility to obtain financing.

FLOODPLAIN DEFINITION

The floodplain of the San Joaquin River is predominantly influenced by: the volume of flows; the capacity of the river channel that has developed since Friant Dam was completed; soil characteristics of the river's banks; and the surrounding topography. The capacity of the river channel appears to be diminishing due to increases in vegetation. The floodplain has also been modified by over 70 ponds created by sand and gravel mining (2M Associates 1989).

Local agencies base site planning policies and flood insurance rates on maps prepared by the Federal Emergency Management Agency (FEMA). These maps are based upon hydraulic analysis and flood maps prepared by the U.S. Army Corps of Engineers. These flood maps can be prepared to show the effects of any possible flood, but they are typically prepared to show periods

such as 20 years, 100 years, 500 years, etc. These periods refer to the expected probability of occurrence of a flood event. For example, a 100-year flood has one chance in one hundred (.01) of occurring in any one year. However, since this is only probability, nothing would prevent more than one 100-year flood occurring in one year, or two years in a row.

FEMA utilizes the 100-year floodplain as the minimum for its National Flood Insurance Program. The Fresno Metropolitan Flood Control District (FMFCD) has stated that the 250-year (.004) flood should be the standard, based upon the confined nature of the floodplain. The San Joaquin floodplain is significantly different from a typical valley flow floodplain, which is characterized by sheet flow conditions. The confined floodplain can result in significantly higher water surface elevations and higher flow rates, causing a much more dangerous situation than is normal in typical sheet flow floodplains where the water spreads out, with little change in velocity or depth (FMFCD 1989; 1990a).

FLOOD FLOWS

Flood flows in the San Joaquin River downstream from Friant Dam result from a wide variety of variables including the following: releases from Friant Dam; natural runoff from surrounding drainage areas; overflow from the Dry Creek project into Little Dry Creek and urban drainage from non-permeable surfaces routed through outfalls, both of which are managed by the FMFCD; and overflow drainage from the Fresno Irrigation District's Herndon Canal. Smaller quantities of water also enter the river in the parkway reach from an outfall operated by the Pacific Gas and Electric Company at its Herndon Substation, an outfall operated by Madera Irrigation District, and an outfall off the Herndon Canal operated by Fresno Irrigation District. In the future, storm flows may be increased by continued urban development and the loss of storage space in Millerton Reservoir due to sedimentation.

The Bureau of Reclamation estimates that the 100-year flood inflow to Friant Dam is 114,000 cfs (2M Associates 1989). The U.S. Army Corps of Engineers estimates that the flow in the river below Friant Dam is 25,000 cfs for a 100-year flood (FMFCD 1989). The FMFCD is currently requiring developers along the river to meet "Standard Project Flood" criteria, which is approximately a 250-year event and represents a design flow of approximately 50,000 cfs (FMFCD 1992). At the Santa Fe bridge, FEMA estimates the 100-year flood flows to be 19,600 cfs and the California Reclamation Board estimates the flows below Friant Dam to be 20,000 cfs (2M Associates 1989). A detailed hydrological analysis of the river floodplain should be performed, with mapping of the 100-year, 200-year, 250-year, and 500-year floodplains. FEMA maps should be updated, based on the results of this analysis.

Friant Dam was designed, and is operated by the Bureau of Reclamation, as an irrigation facility and not a flood control structure. Irrigation waters are stored in Millerton Reservoir and released through irrigation canals to irrigation districts. The flood operation criteria was developed by the U.S. Army Corps of Engineers after the project was completed. Release criteria for the dam includes consideration of downstream factors. Releases at the dam, when combined with downstream releases from Cottonwood Creek and Little Dry Creek, are set at 8,000 cfs by the U.S. Army Corps of Engineers. The dam can "control" a 100-year flood, but not at the 8,000 cfs rate of release. This control is based upon calculations of the expected volume of storage in the various reservoirs upstream of Friant Dam and the expected rate of inflow into these reservoirs. The control release would then release water from Friant Dam at a rate to maintain "control," i.e., not allow the reservoir to fill and begin to release water in an "uncontrolled" manner over the spillway. When the dam is full, and all outlets are utilized, the dam can release 160,000 cfs (Huxley Madeheim, pers. comm., 1991). If releases are allowed at a rate of 20,000 cfs to 27,000 cfs, it is estimated that the dam would "control" the 100-year rainfall or snowmelt flood. However, such high rates of release would exceed downstream criteria and would result in flooding (Counties of Madera and Fresno and City of Fresno 1986).

Prior to the construction of Friant Dam, periodic flood flows in the river kept vegetation from encroaching into flood channels. The channels could carry larger flows than is now possible

because the flood flows would "scour" the channel. The river channel in 1951 was rated to have a safe capacity of 8,000 cfs for flood releases. Now, the channel has difficulty in various locations with passing flows of 3,000 to 3,500 cfs. The higher releases cause destruction of lands, crops, etc. This situation has been developing over the years and is mainly attributed to the intrusion of shrubs, trees, etc., into the river channel. These intrusions restrict the flow, increasing the roughness of the channel and reducing the available width of the flood channel. During the period from 1953 to 1967, the water surface elevation rose 2.5 feet at the constant flow of 8,000 cfs. A portion of the channel from Friant to Gravelly Ford was cleared of vegetation by the U.S. Army Corps of Engineers in 1969 and 1970. This work resulted in a two-foot lowering of the water surface elevation. Presently no local agency can or will provide regular channel maintenance. (Counties of Madera and Fresno and City of Fresno 1986).

Recent flood releases have indicated a deteriorating condition in the river. The increase in vegetation in the channel along some portions of the river have caused the capacity of the existing channel to deteriorate. Dense plant growth restricts flows, causing higher water surface elevation, reduced velocities, and increased sedimentation. During flood releases, low lands adjoining the river are flooded (Counties of Madera and Fresno and City of Fresno 1986). In 1986, releases ranged up to 14,300 cfs, and the water surface elevation approached the Wildwood Mobile Home Park, which should have been well above the floodway line at a maximum river flow of 20,000 cfs. Correction of this problem is complicated by the lack of an agency clearly accepting responsibility for the maintenance of the channel, environmental documentation requirements to initiate a maintenance project, and large mitigation requirements for the loss of riparian vegetation which would result from a maintenance program.

The regional flood control agencies, including the U.S. Army Corps of Engineers, the Fresno Metropolitan Flood Control District, and others should work out a plan to establish responsibility and cost sharing for the maintenance of the channel.

In addition, variations of the hydrological analysis should be performed to determine the effects of various combinations of cleared and uncleared areas of vegetation, with the purpose of developing a sensitivity analysis to find the areas of vegetation which most severely affect the extent of the flood area and where areas of mitigation revegetation could be performed without causing increased flooding. Any snagging and clearing operations should be coordinated with natural resource personnel to minimize conflicts with natural habitat preservation.

The result of these analyses should be combined to produce a flood control program which will provide maximum protection at minimum cost. Mitigation costs should be considered when selecting the appropriate level of protection; higher levels of protection may result in less development close to the river and therefore less requirement for maintenance and mitigation. Various combinations of levels of protection, channel maintenance, and mitigation vegetation should be considered in order to develop several viable options which could then be further refined based upon political and other considerations.

It is recommended that the river not be channelized now and levees not be used in the riverbottom for flood control, as they would significantly compromise the natural habitat values of the parkway and prevent establishment and maintenance of a continuous wildlife corridor. Small side channels could be considered, however, in situations where, if hydrologically feasible, lakes could be connected to the river to maintain water quality.

FUTURE and ONGOING STUDIES relating to HYDROLOGY

The following studies are being performed which will provide additional information related to the hydrology of the river system (San Joaquin River Management Program Work Group 1990).

The U.S. Bureau of Reclamation (USBR) is defining the scope of the San Joaquin Environmental Recovery Program for the San Joaquin River and its tributaries. \$1 million is budgeted over four

years, but the program will require local and State cost-sharing. The recovery effort will emphasize fishery flows.

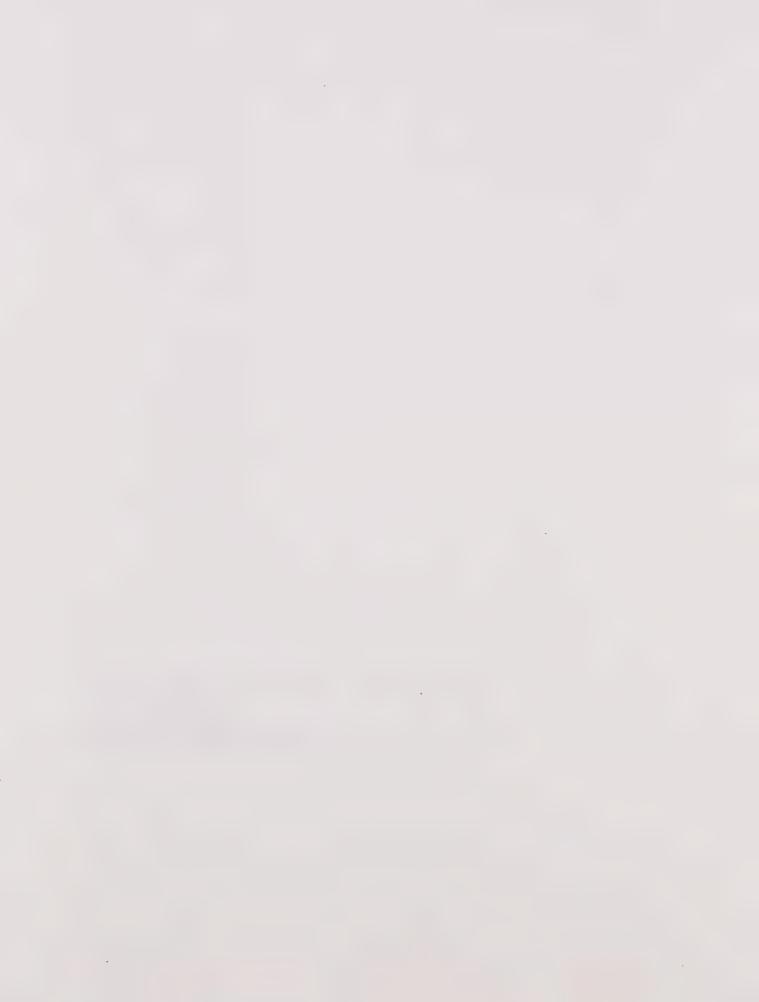
USBR has a computer model to simulate flood behavior of streams based upon average monthly data.

The U.S. Army Corps of Engineers has conceptually developed a revised emergency release diagram which may allow lower estimated releases from Friant Dam for flood situations. These revisions are currently being coordinated between the Corps of Engineers and the USBR (Huxley Madeheim, pers. comm., 1991).

The State Lands Commission is making a comprehensive study of the San Joaquin River from Friant Dam to Gravelly Ford to determine the location of State-owned sovereign and public trust lands. This study includes precise survey leveling and controlled aerial photography mapping of the study corridor. The aerial photographs and topographic information being developed will aid in the establishment of the location of sovereign lands and will be useful for landowners, surveyors, flood control managers, parkway planners, and other government agencies.



Chapter 5
Sand and Gravel



INTRODUCTION

REGIONAL SIGNIFICANCE of the SAN JOAQUIN RIVER

In 1988, pursuant to the Surface Mining and Reclamation Act of 1975 (SMARA), the State Mining and Geology Board studied, identified, and prepared an Environmental Impact Report and then designated approximately 2,350 acres of sand and gravel deposits in San Joaquin River bottomlands as MRZ-2 or "regionally significant." (Source: Designation of Regionally Significant Construction Aggregate Resources in the Fresno Production-Consumption Region EIR, California Department of Conservation, February, 1988.) This designation emphasizes the prime importance of those resources in meeting future needs of the Fresno-Madera region.

OBJECTIVES of the PLAN

There are two general perspectives regarding the sand and gravel resources along the San Joaquin River that will directly affect the scale and character of a San Joaquin River Parkway. These views deal with: (1) the economic importance to a growing area of high-quality, "close to market" sand and gravel resources, with the related objective of protecting those resources for future harvesting and use by the community and; (2) development of reclamation standards to be applied to mined areas with the objective that ecological goals and the public's need for open-space access can be met.

ISSUES and the PARKWAY PLAN

SIGNIFICANCE to the PARKWAY and LOCAL ECONOMY

The conservation of mineral deposits that could be mined but are not yet being mined nor permitted to be mined can significantly affect the resource value and physical breadth of the San Joaquin River Parkway. Continued sand and gravel mining is at least compatible with, and often supportive of, the parkway. Harvesting sand and gravel resources results in the creation of wetlands and has significant potential for enhancement of habitat values, especially in areas where habitat is degraded and the post-mining reclamation plan is intended to improve existing conditions. The sections of this plan on natural resources (Ch. 3) and recreation (Ch. 6) more specifically describe how particular sites in the parkway can benefit from appropriately conducted mining reclamation.

However, the issue of conserving resources has even broader implications relative to the public good. One of the major factors that makes the Fresno-Madera area so appealing for investment is the cost of construction. Because of this factor, the continuation of sand and gravel harvesting along the San Joaquin River affects the economic vitality of the region as a whole in a positive way. Current selling costs at processing sites along the San Joaquin River are between \$4.00 and \$4.50 per ton. Materials from the Kings River or Coalinga, the alternate supply areas, would increase the cost of aggregate to the community for development near the San Joaquin River by approximately 50% and 120%, respectively. Additional economic and social effects of importing sand and gravel resources from distant supply areas include: increased traffic through communities along haul routes; accelerated deterioration of highway infrastructure; and air quality impacts.

Both state and industry estimates point to over 115,000 million tons of sand and gravel reserves existing along the riverbottom that have not been permitted (sources: Buada Associates, 1988; Department of Conservation, 1988). In 1992 dollars, this represents a \$460,000,000 to \$517,500,000 community resource. This amount represents an approximately 25-year resource supply at current annual production levels, which by all indications are going up, however. At a current production rate of roughly 4,000,000 tons per year, existing supplies will be depleted in

10 to 15 years. This estimate about the life of existing supplies may be extended if current growth projections are not reflected in actual development activity.

The economic variables of mining a particular resource area are extremely dynamic and change over time. What might not have been "economically viable" to mine in the past may be so today. What may not look like a viable alternative today may certainly be so in the future. Mining an area is subject to: demand for materials at the time; relative costs of permitting; operational costs; site-specific constraints and mitigation costs (see the State Department of Conservation's Feb. 1988 report for a summary of these constraints); type and quantity of materials present on the site; haul distances; and community acceptance for the need to mine resources. A significant variable is whether an existing processing site can be used or whether, as in the case of supplying a single large contract such as might be associated with a new freeway project, a portable plant could be employed. Because of the high-grade quality of aggregate resources found along the riverbottom, it is likely that as available resources are depleted, the economics will only become more favorable toward the remaining resources.

The Williams/Phillips House, which is an imposing turn-of-the-century residence on land owned by a sand and gravel producer, is recommended for restoration and development as an interpretive center that would feature the importance of sand and gravel resources in the regional economy and the role and techniques of mined land reclamation. The site would also be suitable for interpreting the geology of the river and local agriculture and horticulture (the original owner was a nurseryman).

MRZ-2 RESOURCE AREAS

Most non-permitted mineral deposits, with the exception of those at Lost Lake Regional Park, are now on privately owned lands. Discussions have indicated that some of these owners are interested in harvesting resources at some time in the future, considering deposits much as money in a savings bank. Some landowners are interested in mining only a portion of their properties with an eye towards creating an amenity for some other type of development, even if that development is not recognized in current general plan designation or zoning policies. Other landowners view mining as the ruination of a landscape that supports their crops and are simply not interested in mining in their lifetime.

The local jurisdictions with authority to permit sand and gravel mining should afford the owners of these resources the ability to recover them if they choose. If within the parkway, the reclamation plan should provide that the features of the reclaimed land are compatible with, or supportive of, the parkway. This should be done by agreement with the landowner, ideally in advance of mining and reclamation. This will ensure that reclamation is specifically designed for the parkway's benefit. At a minimum, the managing entity should work with landowners to assure that sand and gravel resources are made available for harvest prior to any alternative land uses being developed on the property that the owners wish to pursue with the appropriate local governing land use agency.

When the most appropriate post-mining use of reclaimed, former MRZ-2 lands would be for the parkway, the managing entity should give priority to acquiring those lands for part of a recreation area, such as is proposed for the expansion of Lost Lake Regional Park, or to close a gap in the wildlife corridor. If a mineral "severance" tax or similar revenue source from sand and gravel production is created, all net revenues from that source should be dedicated solely to acquisition of reclaimed, former MRZ-2 lands or enhanced mitigation that exceeds minimal mined land reclamation standards.

COMPATIBILITY with PARKWAY FACILITIES

The acquisition and provision for public access in the parkway will occur over a lengthy period of time. Any proposed recreation/education uses on lands containing sand and gravel resources not

now under permit should be considered proposed end-uses. In most cases, such public access facilities should not be developed until after resource extraction has taken place. Where public facilities now exist, such as at Lost Lake Regional Park, harvesting of sand and gravel resources should only occur in areas such as parking lots, that can be easily relocated during extraction activities.

Whenever possible, trails, restrooms, and any other parkway structure should be sited to avoid precluding the extraction of known sand and gravel resources or MRZ-2 designated resources. Low-cost or readily replaced parkway access facilities, such as unpaved trails, might be developed in areas containing mineral resources that have yet to be extracted. In these situations, any facility developed should be considered as temporary. Alternate locations for parkway recreational uses should be identified at the time of detailed site-planning such that when and if mineral resources extraction takes place, those uses can be safely continued in a manner that does not conflict with extraction operations.

PUBLIC SAFETY

Sand and gravel operations are inherently unsafe environments for the general public. For safety reasons, the general public should be kept at a minimum of 300 feet away from all active mining operations. No intensive public use areas should be sited near processing plants. Temporary berms, a minimum 10' height, with signed fencing should be used to separate publicly accessible trails and use areas from mining activities. Where trails cross haul routes, consideration should be given to using bridges to segregate use or to opening trails for public use only when mining is not active (i.e., weekends).

LOCAL GENERAL PLAN CONSERVATION POLICIES

Designation by the State Mining and Geology Board of MRZ-2 areas in the riverbottom mandates that local jurisdictions incorporate policies into local general plans to manage land uses which affect resources of regional significance in such a way as not to threaten their potential for extraction and to "emphasize the conservation and development of identified mineral deposits" (quoted from §2762, Calif. Public Resources Code, a provision of SMARA). The County of Fresno, the County of Madera, and the City of Fresno each have mineral sections in their respective General Plan Conservation and Open Space Elements. Each jurisdiction has objectives that state the need for conserving these resources. However, their individual policies vary. Salient aspects of local land use and conservation policies for sand and gravel resources are compared in Table 5-1.

Local general plan policies about the conservation of sand and gravel resources should be coordinated to: (1) clearly define land uses that are not compatible with mineral resource recovery, using the County of Madera's policies as a minimal model; (2) define "impact areas" as those lands immediately adjacent to identified MRZ-2 resource areas, processing plant sites, and within a 1/8 mile distance of primary haul routes between resource areas and major processing areas where processing does not occur on-site; (3) require adjacent or nearby project proposals that might conflict with existing and future mining activities to provide on-site mitigation of any potential conflicts.

Table 5-1 Comparison of General Plan Policies about Conservation of MRZ-2 Mineral Resource Areas

Feature	Fresno County	Madera County	. City of Fresno
Coordination	No mention.	The county shall coordinate mineral extraction policies with Fresno County and City.	The City will coordinate with Fresno County and the State in identifying and mapping areas containing deposits. A mining permit approved by another agency will be honored by the City upon annexation providing the permit is in compliance with state law and the terms of the permit.
Zoning	No specifics provided.	Open Space (OS); Public Open Space (POS), Agricultural, Rural, Exclusive- 20 and -40 (ARE-20 and ARE-40).	Open Conservation Zone District (O). Upon annexation of additional designated properties the City shall rezone those to the "O" Zone District.
Incompatible Land Uses in MRZ-2 Zones	Within areas classified as having known mineral resources, uses not compatible with mineral resource recovery shall not be permitted.	Incompatible land uses not permitted within the identified areas are those that are inherently incompatible with mining and/or require a high public or private investment in structures, land improvements and landscaping preventing mining because of higher economic value of land and improvements.	The development of land uses that preclude mineral extraction shall not be permitted.
Incompatible Land Uses in Surrounding Impact Areas	Incompatible land uses should not be permitted within the impact areas of existing or potential surface mining areas.	Incompatible land uses not permitted within "impact areas". Incompatible land uses are the same as described above. A buffer area of Agricultural, Rural, ARE-20, or ARE-40 will be established between surface mining land and incompatible land uses.	No mention.

CONDITIONAL USE PERMITS and MONITORING ACTIVITIES

Historically, demands on local agency staff have seen only the most minimal of monitoring and enforcement to assure that reclamation activities are successfully completed. Currently, local agencies are mandated by SMARA to conduct inspections one-time per year. Though there are many examples along the San Joaquin River of successful reclamation, there are also examples such as at the corner of Rice Road and Lane Drive, that demonstrate how unsafe and unsightly landscapes can result from a lack of enforcement. Given the sophisticated character of reclamation activities in a riverine environment, this level of monitoring is insufficient.

Authority and responsibility for permitting, reclamation plan requirements, and monitoring should remain with individual city and county jurisdictions. However, the City of Fresno and the two counties should develop a consistent approach to these activities. In particular, monitoring of reclamation activities should take place a minimum of two times per year.

POST-RECLAMATION USES

Use of any property after mining and reclamation is limited to activities that are legally permitted by current local general plan designations and zoning policies for the area. Historically, proposed "end uses" have been viewed as mutually exclusive of one another, with open space, agriculture, recreation, or housing identified as a single, end use of the mined lands. This limited perspective does not recognize that wildlife habitat values could accrue consistent with what other uses of reclaimed lands are permitted by the general plan

Because of the location in the riverbottom and potential benefit to wildlife habitat, all end uses should be developed in future reclamation plans as "multiple-use" proposals that include, at a minimum, a wildlife habitat element. Site-specific wildlife and fisheries habitat development programs for areas of open water, seasonal inundation, and surrounding upland zones should be developed as a part of each reclamation plan. This approach should complement, not prohibit, other land uses, such as housing and agriculture, from being identified as potential end uses. Although the reclaimed end use may not necessarily be for the sole benefit of the parkway, if the mined property is within or adjacent to the parkway, provision should be made for access along and perpendicular to the San Joaquin River whenever this parkway plan or another applicable plan identifies a potential trail route, trailhead parking, or other access facility in the affected area.

RECLAMATION PLANS and EVALUATION CRITERIA

The preparation of site plans to depict the product of reclamation activities is a traditional form of communication. Reliance on preconceived, precise site plans leads to many conflicts between what was perceived as "promised" vs. what might actually be possible. From a habitat development perspective, the final landscape details along the riverbottom cannot be accurately determined in advance, on a piece of paper. There are many unknown variables (such as actual amount of overburden, depth of gravel resources, and height of the water table) that make reclamation plans as much an art as a science. This is particularly true for the creation of water areas and manipulating land/water edge conditions. It is also true for such activities as vegetation restoration where soil conditions, growth rates, and ultimate success is not measured in the first year, but only after plants have become established. Though reclamation plans are an accepted tool, they should be used only as a guide to create a successful, healthy landscape, and it should be recognized that field changes to plans are likely.

SMARA does not specifically mandate that static drawings be relied upon to depict reclamation activities and results. It does mandate that site-specific evaluation criteria be established for judging compliance with the approved reclamation plan. Applying evaluation criteria in a meaningful way defers much decision making to the field and emphasizes the need for monitoring of those decisions.

A logical approach to reclamation planning and design is to first develop initial site reclamation plans that: coordinate reclamation activities with mining operations; express final end use patterns; and define the general level of commitment for a given reclamation effort. However, these plans should be accompanied by site-specific evaluation criteria developed jointly by the County of Fresno, the County of Madera, and the City of Fresno, in cooperation with the parkway managing entity for land and water areas created by the mining process. These criteria, rather than the original plans, should be employed, by phase, to determine the final configuration of reclaimed lands. Monitoring of reclamation activities should, at a minimum, be conducted by qualified technical specialists, on a quarterly basis if possible, but not less frequently than semiannually, for a five year period after completion of planting.

RECLAMATION GUIDELINES

Reclamation guidelines must be realistic and enforceable. They should also be flexible to recognize that detailed knowledge of hidden mineral resources is not a precise science. Standards should be comprehensive enough to permit landowners (including instances of public ownership) a variety of options for the disposition of lands located outside the standard project flood zone.

Existing reclamation requirements of the Counties of Fresno and Madera and the City of Fresno are generally oriented to protecting existing sensitive resources and reflecting the minimum standards required by SMARA. New statewide reclamation standards were adopted by the State Mining and Geology Board on December 10, 1991, for all reclamation plans approved after January 1, 1992.

To the extent not adequately addressed in the new statewide standards, the following requirements should be adopted by the County if Fresno, the County of Madera, and the City of Fresno for all new permits in the riverbottom and those existing permitted areas that this parkway plan identifies as recreation areas, natural reserves, or the wildlife corridor.

Topsoil/Overburden Salvage, Maintenance, and Redistribution

No topsoil materials may be removed from the site, but shall be stockpiled for later use in reclamation activities. Stockpiled topsoil and other overburden retained for reclamation should be seeded annually as appropriate with a native erosion control mixture to prevent erosion and sedimentation of the river, open water bodies, or nearby drainage areas.

Topsoil shall be segregated from other overburden materials for use as a growing medium in areas to be revegetated.

Wildlife Habitat

Existing mature wetland, riparian, and upland forest communities should be preserved and protected from mining. Often, because of intermingled tree roots, mature tree removal for sand and gravel extraction is impracticable. Extraction activities that occur next to mature plant communities should be set back twice the distance of the drip line of mature trees or a minimum of 25 feet, whichever is greater.

Revegetation patterns in reclamation plans should reflect the river environment as a continuous corridor of wildlife movement. Revegetation plans should strive to provide for multiple, braided bands of vegetative cover parallel to the river and should include some clumping patterns for diversity and cover.

Ponds created by mining should be set back from the edge of the existing riparian zone. However, this should not necessarily preclude ponds from being connected to the river to prevent eutrophication. Connecting ponds to the river, however, may directly conflict with fisheries resource objectives unless inlets and outlets can be screened effectively to control fish movement. In such cases, thorough, detailed hydrological and biological studies should be conducted to assure maximum benefit and avoid adverse effects created by such an action.

Wherever possible the edges of water features created by mining activities should be manipulated to create:

- a scalloped basin perimeter, forming extended peninsulas wherever practical;
- · islands; and
- stepped benches of various widths at roughly 3-foot vertical intervals both above and below the average water lines of gravel ponds.

Backfilling, Regrading, Slope Stability, and Recontouring

At closure, permanent piles or dumps of mine waste and overburden shall be stabilized and contoured to conform visually and functionally with the natural surroundings. Earth forms (berms and swales) should generally parallel and angle downstream to the river, not be constructed perpendicular to it.

Final reclaimed slopes shall, at a minimum, not exceed a 2:1 slope (horizontal:vertical) for all mined lands above water to 5 feet under water.

Final slope conditions in all reclamation areas associated with public access to and around open water bodies shall, at a minimum, not exceed 3:1 (horizontal:vertical) above the water line to 5 feet under water.

Where structures are to be present, as identified in the reclamation plans, backfill should be compacted sufficient to meet local building code requirements.

Vegetation Restoration

Generally, only native plant species endemic to the riverbottom and similar environments in the region shall be used in vegetation restoration. Exceptions include turf areas for golf courses and other public recreation areas and agricultural lands. Where practical, all native woody plants used in vegetation restoration should come from site-specific propagules (seeds, nuts, acoms, cuttings, root divisions, etc). In order to protect the health of existing plant communities, and so that they may continue to reproduce, over-collection shall not occur.

Planting periods should relate to the type of propagules used (containers, cuttings, etc.). Planting should be conducted in the fall and winter months.

A vegetative cover capable of self-regeneration and ecological succession without continued dependence on irrigation, soil amendments, or fertilizer shall be established on disturbed lands.

Vegetative cover, density, and species-richness of the reclaimed mined lands developed for wildlife habitat shall be similar to naturally occurring vegetation on site or in the surrounding area and shall be documented in baseline studies carried out prior to the initiation of mining activities.

When the success of the proposed revegetation plan cannot be documented from experience with similar species and conditions, or by relying on competent professional advice based on experience with the species to be planted, test plots should be planted simultaneously with mining. The purpose shall be to determine the most appropriate planting procedures to be followed to ensure successful implementation of the proposed revegetation plan. Flexibility in all parameters including planting time should be allowed in these cases.

Where surface mining activities result in compaction of the soil, ripping, disking, or other means shall be used in areas to be revegetated to eliminate compaction and to establish a suitable root zone in preparation for planting.

Prior to closure, all access roads, haul roads, and other traffic routes shall be ripped to eliminate compaction, covered with suitable growth media or topsoil, and vegetation restored, unless the permitting authority approves in the reclamation plan the retention of specific roads as consistent with the approved end use. Any bridge that can be incorporated in the parkway trail network shall be retained if safe for public recreational use and all necessary approvals for retention of the bridge are obtained. Other temporary crossings that are hazardous to river users should be removed as soon as possible after cessation of use in mining operations.

Soil analysis shall be required to determine the presence or absence of elements essential for plant growth and to determine those soluble elements that may be toxic to plants, if the soil has been chemically altered in any way or stockpiled for more than two years. Whenever fertility levels or

soil constituents are inadequate to successfully implement the revegetation program, fertilizer or other soil amendments shall be used to create a suitable growth medium. The need for fertilizer or nutrient-enhancing soil amendments shall be determined on a case-by-case basis. Fertilizers or other soil amendments shall be used in a manner so as not contaminate surface or ground water.

Surface and Ground Water

Because the gravels of the San Joaquin River convey water to underground aquifers, erosion and sedimentation created by any aspect of mining operations, including the generation of processing fines, shall be controlled to isolate siltation to watercourses and open water areas, other than those specifically identified and managed as siltation ponds.

Where natural drainages are covered, restricted, rerouted, of otherwise impacted by mining activities, mitigating measures shall be identified in the reclamation plan to assure that runoff shall not cause excessive erosion and wildlife passages are maintained.

Chapter 6 Recreation



BACKGROUND

Archaeological evidence suggests that the San Joaquin River has been a magnet for recreation seekers for as long as people have lived by the river. For Native Americans the river was the focus of their lives: for food, water, and play and relaxation. Children undoubtedly used the river for play and for hunting and fishing games. Adults likely relaxed in the cooling waters during warm weather.

For homesteaders and the early residents of nearby communities, the river was the natural destination for leisure time. Horses and buggies, and later street cars brought area residents to the San Joaquin River. The river was an area of relief and diversion within the vast Central Valley. Cooling waters, wildlife, and the shade of floodplain trees attracted people to the river.

With the diversion and impoundment of the river, the surrounding valley was provided with water to create one of the largest and most productive agricultural districts in the world. Fresno became the business center for the agricultural empire and grew into a city with an urban population that continued to look to the river as a destination for leisure time.

Today Fresno and Madera Counties continue to grow, putting new pressures on the San Joaquin River to meet recreation demands. Those demands come from a population that is characterized by its extraordinary cultural diversity. Historically, the demand for recreation was handled sufficiently by some public lands and a few private lands that were open to the public. Trespass on private lands was tolerated because of low use levels and the generally benign activities of trespassers.

The current demands for recreation have created problems on both public and private lands. On public lands, such as the two regional parks adjacent to the river, demand has created use levels that are outstripping the carrying capacities and degrading the resources. The high use has also exceeded the County of Fresno's financial resources to maintain the parks adequately. Some of the recreation demand has put pressures on the private lands. Disturbingly, the nature of the trespass activities has changed, reflecting the increasing social problems of the urban areas and has reached levels that are unacceptable to land owners.

Both the historic and current demand for recreation is due to the natural resource values that exist along the river. It is the natural beauty, wildlife, and landscape diversity that attract people to the river. Preserving the natural resources will be the key to being able to satisfy the demand for recreation.

The recreational element of this plan is based on the following goals:

- To preserve and manage the natural and cultural resources, including archaeological and Native American sites, in the parkway to meet current and future recreational and educational needs.
- To provide recreational and educational opportunities to all segments of the population.
- To manage the recreational uses to reduce or eliminate: indiscriminate activities; trespass on private lands; and human impacts on sensitive habitat areas.

EXISTING RECREATION PATTERNS and FACILITIES

The existing recreation facilities along and adjacent to the San Joaquin River are situated on public and private lands. The public facilities include parks and other lands owned by government agencies. They are open to the public with some use restrictions and entry fees. The private recreation facilities include golf courses, fishing areas, and beach clubs on private lands that are open to the public. Use of these lands is usually restricted to certain activities, and access is restricted by entry fees or membership.

Public Recreation Facilities (listed geographically from Friant westward to Highway 145):

Millerton Lake State Recreation Area lies immediately east of the parkway. It is a highly developed recreation area. Existing or planned facilities include: picnic areas, swimming beaches, campgrounds, hiking and equestrian trails, boat launching facilities and marinas, excursion ferry boat service, scenic overlooks, and the historic Millerton Courthouse.

The California Department of Fish and Game's San Joaquin Fish Hatchery is located in the town of Friant. The hatchery is open to the public for tours. Other land near the hatchery is owned by DFG, but there is no public access.

Lost Lake Regional Park is operated by the Fresno County Parks Division. The park includes 305 acres, with 229 acres owned by Fresno County and 76 acres leased from the Wildlife Conservation Board. The park facilities include restrooms, a 42-space campground, picnic and barbecue areas, a softball field, children's playgrounds, a 38-acre lake, and a nature trail. A recently constructed volleyball facility is used for tournaments. The park runs along the Fresno County side of the river and has good access to the river along much of its length. The park is used almost daily by school groups and is also used as a canoe put-in site. There is a \$3 per vehicle entry fee.

The Willow Unit, a part of the San Joaquin River Ecological Reserve, is managed as wildlife habitat by the California Department of Fish and Game. Public use of the reserve is currently limited to guided groups. Possible future uses may include hiking, fishing, seasonal canoe access, nature study, interpretive and educational programs, and other uses compatible with wildlife habitat.

The **Woodward Bluffs** along Friant Expressway were acquired by Fresno County to preserve views. The bluffs contain open grassland and will be traversed by a recreation trail parallel to the expressway and connecting the bluffs to Woodward Park.

Woodward Park, operated by the City of Fresno, lies predominantly atop the bluffs. It is a relatively developed, well maintained urban park. Facilities include several lakes, individual and group picnic shelters, restrooms, Japanese gardens, and open play fields. One undeveloped segment of Woodward Park is a narrow strip of land connecting the main park to a two-acre parcel at the river's edge. There is a \$2 per vehicle entry fee.

The Milburn Unit is another unit of the San Joaquin River Ecological Reserve. This former sand and gravel quarry will be managed as wildlife habitat by the Department of Fish and Game after restoration of land and water areas. Redevelopment plans have not yet been completed, but most of the site will be flooded when drainage pumps are turned off. Probable improvements include islands, trails, fishing and canoe access, and nesting and roosting sites. Currently, there is no legal access to the site, except by canoe from the river. Public use of the reserve is currently limited to guided groups. When visitor facilities are improved, possible future uses may include hiking, fishing, seasonal canoe access, nature study, and other uses compatible with wildlife habitat.

Riverside Municipal Golf Course is operated by the City of Fresno. The 18-hole golf course is located primarily on top of the river bluffs, just downstream of the Santa Fe railroad bridge.

Skaggs Bridge Regional Park, also operated by the Fresno County Parks Division, is a 17-acre park for day use, beach, and fishing activities. The park land is on the Fresno side of the river, just west of Highway 145. Facilities include individual and group picnic areas and restrooms. There is a \$3 per vehicle entry fee.

Private Recreation Facilities

There are several private recreation areas along the river available to the public on a fee basis. These include the Sportsman's Club and the Fort Washington Beach, which offer river access for fishing and beach activities for a fee. The Fig Garden Golf Club is open to the public for a fee, and the San Joaquin Country Club is open to members only and has an 18-month waiting list. Approval has been granted to construct a 3-par course on land immediately downstream of DFG's Milburn Unit. Some landowners in the riverbottom also permit fishing, hunting, and other activities on their property for a fee. A large picnic area set in an oak woodland on the Coombs Ranch is available for use by organized groups on a permit-only basis.

Pacific Gas & Electric owns a large parcel surrounding the Herndon Substation, just east of Highway 99. A portion of the land is leased as an equestrian facility and provides cross country terrain and jumps for training and for competitions.

Camp Pashayan, owned by the Sequoia Council of the Boy Scouts of America, is located immediately upstream from Highway 99 within the City of Fresno. Facilities include restrooms, picnic tables and barbecues, a ropes course, and group camping areas.

ESTIMATED RECREATION DEMAND

Demand for recreation can be expressed not only in terms of the changes expected within the population as a whole (often seen as a function of the net growth in population), but of changing tastes for different recreational activities. The types of recreational opportunities being proposed within the parkway generally fall within a group that has enjoyed consistent growth in demand over the past decade. In general, net changes in demand are expected to increase 1.5% to 2.0% annually. This is illustrated by Table 6-1,which is derived from demand estimates calculated by the California Department of Parks and Recreation.

Table 6-1
Estimated Demand
for Particular Recreational Activities
Fresno and Madera Counties

Activity	1990	1995	2000	% Growth Annually
Boating*	302,649	328,999	353,335	1.7%
Land/Stream Fishing	1,949,247	2,119,989	2,285,216	1.7%
Picnicking	3,623,807	3,887,982	4,144,531	1.4%
Hiking/Backpacking	3,290,625	3,577,430	3,847,772	1.7%
Nature Appreciation	2,655,461	2,898,315	3,124,956	1.8%
Visiting Scenic Areas	2,016,011	2,266,335	2,475,836	2.3%
Visiting Cultural Sites	771,230	856,062	932,044	2.1%
Horseback Riding	686,219	745,236	800,672	1.7%
Freshwater Swimming	1,007,776	1,088,890	1,173,324	1.6%

^{*} Human-powered only, excludes motorboats and sailboats.

Additional indicators of demand are a function of employment and disposable income, available transportation, the location of facilities relative to population centers, the type and variety of facilities offered, and population growth.

The current recession has, of course, negatively affected employment and disposable income in the Fresno-Madera metropolitan area. Parkway recreational areas and natural reserves will accommodate a variety of activities appropriate to a range of income levels, however.

The parkway is highly accessible to existing transportation corridors, as it is crossed by the three principal north-south state highways serving the Fresno-Madera metropolitan area. The location of the parkway relative to the population centers of Fresno and Madera Counties will make it an attractive alternative to travelling to more distant national and state parks in central California. Moreover, because of the variety of recreational facilities and opportunities proposed to offered, it is more likely that the parkway will be visited more frequently by the same individuals than would be the case with a typical city park having a more limited offering. From the perspective of visitors coming from outside the Fresno-Madera metropolitan area, the parkway should generate significant demand because it would offer recreational opportunities not available elsewhere the San Joaquin Valley at the same scale or variety.

Combined population growth within the region has been impressive and is expected to continue at or near historical rates, with regional growth rates consistently staying ahead of statewide growth rates, as illustrated in the following tables.

Table 6-2 Projected Population Growth

(in thousands)

Jurisdiction	1980	1990	2000	2010	2020
Madera County Fresno County Totals	63.1 514.6 577.7	89.1 646.8 735.9	124.4 792.1 916.5	140.5 843.7 984.2	164.7 954.0 1,118.7
California	23,667.9	29,473.4	34,908.9	36,259.0	39,619.0

Table 6-3 Percentage Changes in Population

Jurisdiction	'80-'90	'90-2000
Madera County Fresno County	41.2 25.7	39.5 22.5
California	24.5	18.4

Other indicators of recreational demand include the use levels currently experienced at the two major parks in the Fresno-Madera region, Woodward Park (about 1,000,000 annually) and Roeding Park and Zoo (about 1,500,000 annually). Peak weekend visitation (computed by averaging visitation figures over a nine-month period, or approximately 40 weekends per year) is approximately 20,000 visitors per weekend day at Roeding Park and Zoo and approximately 12,000 visitors per weekend day at Woodward Park. In terms of automobile traffic, this translates to approximately 8,000 and 5,000 vehicles per day, respectively.

The American River Parkway, which extends from Folsom to downtown Sacramento, generates comparable levels of use on a per capita basis. The American River Parkway offers similar recreational amenities and opportunities as are proposed for the San Joaquin River Parkway. Both river parkways lie in the same general proximity and relationship to the urban area. The estimates of overall use by selected categories shown in Table 6-4 provide a reasonably accurate picture of levels of recreational use to be anticipated along the San Joaquin River.

Table 6-4 Recreational Demand: American River Parkway

Total current (1990) population of Sacramento County is 1,410,584.

Ratio of Use-Days to Population

(i.e., the annual frequency that particular activities are likely to be engaged in by the entire population over a year, based on surveys)

Trail Use	0.69
Picnicking	0.41
Nature Study	0.57
Field Sports	0.16

Total Visitor Days per Year

Trail Use	973,459
Picnicking	577,754
Nature Study	800,259
Field Sports	222,505

Visitor-Days on a Typical Weekend Day

Trail Use	12,168
Picnicking	7,220
Nature Study	. 10,003
Field Sports	2,781

ATTENDANCE FORECASTS by PARTICULAR AREAS

Recreational demand can also be expressed in terms of projected usage levels at the particular recreation areas and natural reserves proposed for the parkway. The following table shows estimated attendance once the principal proposed facilities become fully established and operate at levels close to capacity.

Table 6-5
Attendance Forecasts 6
(All facilities in operation)

	Person/Car	Cars/Year	Persons/Year	Persons/ Weekend Day	Persons/ Weekday
Lost Lake – day use	2.5	212,000	530,000	5,000	500
Lost Lake - camping (100 sites)	3.0	16,800	50,000	240	120
Woodward Park expansion	2.5	80,000	200,000	2,000	170
Highway 99 park – day use	2.5	232,000	580,000	5,100	620
Hwy 99 – camping (100 sites)	3.0	20,000	60,000	300	140
Natural reserves			76,000	300	200
Gunner Ranch – day use	2.5	6,000	15,000	125	20
Moen Lakes fishing area	2.0	40,000	80,000	600	125
Skaggs Bridge	4.0	42,500	170,000	1,800	100
TOTALS		649,300	1,761,000	15,465	1,995

These totals suggest a total peak weekend day visitation throughout the parkway's recreation areas and natural reserves of approximately 15,500 persons. When projected on an annual basis, this would indicate base level visitation of nearly 1,800,000 persons. This represents an average of slightly less than 2 visits per person annually from the total population projected for the immediate region by 2010. This figure is conservative, since it only takes into account potential parkway visitors from the immediate region. Parkway users travelling from a distance greater than 50 miles are anticipated to make up as much as 20% of total visitation at full buildout of the facilities.

Ledger Island natural reserve, with the preponderance being school groups visiting on weekdays; approximately 30,000 at the Milburn Unit, with the preponderance being weekend visits for nature appreciation and fishing.

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Gunner property - 15 acres with 1,000 visitors per acre annually.

Moen Fishing Lakes - Total annual usage of 80,000 visitors.

⁶ The following assumptions are made in the table:

Lost Lake day use - approximately 2,100 cars per peak weekend; about 80 acres developed for day use, with 10,000 visitors per acre annually.

Lost Lake Campsites - approximately 500 persons using each site per year or approximately 170 cars/site/year. Woodward Park expansion - approximately 25 additional developed acres with 10,000 visitors per acre annually. Highway 99 day use - approximately 80 acres developed for day use, with 11,000 visitors per acre annually; heavy weekday use by travellers on Highway 99.

Hwy 99 campground - 600 persons using each site per year or approximately 200 cars/site/year.

Natural reserves - approximately 45,000 visitors annually to the proposed Willows Unit-Ball Ranch-Rank Island-

Skaggs Bridge - 17 acres with approximately 10,000 visitors per acre.

RECREATION CONCEPT

The goals of the recreation element of the parkway plan are to meet increasing demand for recreation in the Fresno-Madera region while preserving the natural resources of the river and respecting the rights and privacy of property owners. The plan concentrates proposed recreation facilities near and adjacent to the existing recreation facilities. Impacts of recreation will be reduced by improving and expanding existing facilities rather than accommodating them at new locations along the river. Existing facilities are located at Lost Lake Regional Park and near the existing crossings at Highways 41, 99, and 145.

By clustering the proposed recreation facilities at these locations, impacts can be minimized by using existing access routes, sharing support facilities, and concentrating uses away from environmentally and archaeologically sensitive areas. The proposed recreation areas will, where possible, capitalize on opportunities associated with the reclamation of existing and future sand and gravel operations.

Proper management of recreation uses and visitors will minimize conflicts with private landowners and with environmentally and archæologically sensitive areas. Signing, patrols, and enforcement will minimize undesirable activities.

Within the recreation areas, activities will be located to minimize impacts on the river environment. High activity level recreation uses and related facilities will be located as far from the river as possible. Water bodies and planting masses of native vegetation will be used to further isolate intensive uses from the river. In general, only those uses that are river-dependent, such as fishing, canoeing, and nature observation will be located on the river. Swimming areas, campgrounds, picnic areas, the multipurpose trail, turf areas for informal play, playgrounds and support facilities such as service roads, parking, concessions, and restrooms will be sited away from environmentally sensitive areas. Many of these active use areas will be located in sand and gravel reclamation areas.

The recreation areas will be linked by a continuous multipurpose trail, tying them together into a system of recreation components. The linkages will include trails with surfaces for pedestrian, equestrian, and wheeled uses and trails that serve as feeders from bicycle routes in nearby urbanized areas. Within the recreation areas a system of internal trails will add to the network. These trails will range from wide multipurpose trails to narrow footpaths. In addition to the land-based trails, the river itself will serve as a canoe trail. Canoe facilities will include put-in and take-out areas, spaced to provide opportunities for canoe trips of varying lengths. Canoe rest areas with vault toilets will be located so as to reduce trespass problems on private land adjacent to the river.

This recreation concept will accommodate a continuous corridor of wildlife habitat, with buffers, along the length of the parkway. Habitat areas adjoining or within the recreation areas will be clearly demarcated and public use in these areas will be limited to nature observation and other low impact uses. The primary purpose of these areas is to preserve the continuity of the wildlife corridor where it adjoins a recreation area or to provide a buffer between a recreation area and a natural reserve.

RECREATION MANAGEMENT

Recreation will be only one of a number of management objectives for the parkway. This objective will need to be balanced within overall parkway management objectives. Recreation activities must be balanced with preserving wildlife habitat, protecting archaeological sites, and minimizing impacts on adjacent private property. Recreation facilities will be located and designed to minimize impacts on the environment and on adjacent properties. Interpretive programs offer an effective method of managing visitors and informing them about the parkway

and its sensitive and fragile features. Monitoring parkway use and environmental conditions and consulting with affected landowners will ensure that impacts are minimized. Trails and other facilities can be closed, redesigned, or relocated when problems occur. Temporary trail closures may be necessary seasonally or at other times because of conditions such as flood hazard, agricultural spraying, or the presence of sensitive wildlife.

The impact of trails and other recreational uses on wildlife is hard to quantify. There are a few studies that address the issue. One study in California that included field study, concluded that birds in wetlands apparently become acclimated to human disturbance. Birds were disturbed less by human activity in areas that had regular human access than areas that were rarely visited by humans. However, the study also documented that areas with high human use were less likely to be visited by birds. (Josselyn, M.N., M. Martindale, and J.M. Duffield. 1989. Public Access and Wetlands: Impacts of Recreational Use. Romberg Tiburon Centers. San Francisco State University). Buffers are recommended to separate recreational uses and other human activity from wildlife habitat. Interpretive signs can also educate parkway visitors on proper behavior to minimize disturbances when near wildlife or their habitat.

Use levels should be monitored to ensure that facilities can handle demands. If recreation use levels are high enough to have negative impacts on other parkway management objectives, parkway use should be limited by a permit system for certain activities, users fees, escorted tours in sensitive habitat areas, or other management techniques. Impacts on adjacent private property also need monitoring to assure that privacy and security are being maintained. Parkway facilities should be set back from private dwellings at least 150 feet, with a buffer zone planted with screening vegetation where possible.

Much of the parkway will be adjacent to existing private property. Adjacent landowners have expressed concerns regarding trespass, vandalism, and other undesirable activities. While these fears are understandable, and sometimes based on past experiences, they are generally unfounded in well managed parkland. The experiences of landowners adjacent to similar facilities throughout California show that in most cases the undesirable activities are actually reduced when open land or land with no obvious purpose becomes a trail or other recreational facility with proper management. One such study documented landowner attitudes before and after a trail was developed and showed that in most cases, landowners had a better than expected experience living next to the trail (East Bay Regional Park District. A Trails Study, Neighbor and User Viewpoints, 1978). The presence of legitimate users in the parkway will discourage undesirable activities and unlawful conduct, thereby creating a climate where those activities will not be tolerated and where there will be a larger number of potential witnesses to report inappropriate conduct.

The creation of controlled, gated access with the payment of a day-use fee, where none was required before, will deter entrance by persons with no legitimate recreational pursuit. In addition, cooperation should be sought from private parties having legal control of access routes into the riverbottom, such as the Santa Fe Railway Co., to reduce opportunities for persons to enter the parkway and nearby private property and engage in undesirable conduct. Unless those private parties take measures to control access through their property, efforts undertaken by public agencies to control access elsewhere can be compromised.

Effective management and operation of the parkway will be crucial to minimizing undesirable activities and unlawful conduct and improving acceptance by adjacent landowners. Undesirable or unlawful activities such as vandalism, after-hours use, and loitering would be controlled with a regular patrol presence by rangers and other parkway personnel.

A "Park Watch" program, with appropriate signs throughout the parkway, should be implemented to encourage visitors and residents to be alert and report suspicious activities to parkway authorities. The effectiveness of this program can be enhanced by assuring an adequate number and distribution of emergency-only telephones and conventional coin-activated public telephones.

Vandalism can be reduced by regular maintenance and cleaning of parkway facilities. Vandalism is less likely to occur when a high level of maintenance is visible.

A volunteer program to supplement the patrolling and maintenance of the parkway should be encouraged. Volunteers should limit their assistance to reporting undesirable or unlawful activities to parkway law enforcement personnel, however.

PROPOSED RECREATION COMPONENTS

The parkway recreation facilities outlined in this plan include both existing and proposed facilities. In addition to new facilities, improvements are proposed for most of the existing facilities. This will provide an opportunity to establish parkway facility standards. Standards should be established to cover all aspects of new construction and improvements, including use of materials, engineering, design, signs, fencing, planting, etc. Some of the goals of the standards would be to establish a common visual image to unify the elements of the parkway into a recognizable unit and to coordinate improvements with other parkway objectives, such as minimizing impacts on wildlife and using native plant materials in landscaping.

Recreation Areas

There are five areas where existing and proposed recreational uses are clustered: Lost Lake Regional Park, Woodward Park (Highway 41), Scout Island, Highway 99, and Skaggs Bridge Regional Park (Highway 145). Most of the traditional "park" land uses and active recreation uses will occur in these areas.

Lost Lake Regional Park. Enhancement, restoration, expansion, and improved operations and management are proposed for this existing county park. Sand and gravel deposits, both within the existing park and on adjacent properties, may provide opportunities for the redevelopment and expansion of the park and the creation of water features while providing royalty income. A series of connected lakes can be included in the mined land reclamation plans, each providing different recreation opportunities. (Portions of the existing park were mined for sand and gravel in the past, creating Lost Lake and some of the landforms.) Camping, swimming, beach activities, fishing, boating and other active uses can be developed on the lakes, away from the river. The lakes can also provide a buffer between the active uses in upland areas and the sensitive habitat areas close to the river. Existing park uses along the river can be relocated upland, consistent with the retention of the area fronting on the river as a wildlife corridor. Much of the existing park, and Lost Lake itself, is in need of environmental restoration, including the removal of exotic plant species and restoration of native species in more natural planting patterns.

Lost Lake Regional Park's existing land is on the Fresno County side only, since the park was developed by the County of Fresno. Both sides of the river are needed, however, for proper resource management of the river and riparian areas. The possibility of expanding the park to include land on the Madera County side should be considered. Land on the Madera County side is not, however, to be used for recreational purposes. Securing this area for eventual revegetation will provide a scenic backdrop for the park while also providing for the wildlife corridor in an area less susceptible to human interference because of the presence of the river as a barrier to recreational users on the Fresno County side. The managing entity should have jurisdiction to manage lands in both counties, and the California Department of Parks and Recreation or the San Joaquin River Conservancy proposed in this plan should be considered for assuming that responsibility.

Because of its proximity to the large state recreation area at Millerton Lake, there may be overall savings through economies of scale were DPR to assume operational responsibility for Lost Lake and combine those operations with its present operations at Millerton Lake. This transfer could free a corresponding amount of Fresno County funds for enhanced operations and safety, security, and sanitation improvements at Skaggs Bridge. DPR's partnership with other state and local public agencies in the parkway would be strengthened. DPR's ability to assume these

responsibilities would depend heavily, however, on the availability of new state capital outlay funds for the improvements needed at Lost Lake and on a substantial improvement in the state fiscal condition.

Because of its location relative to the town of Friant and its distance from activity centers within the park, the present entrance may not be the most appropriate. Should the park expand southward upon completion of sand and gravel operations, the possibility of relocating the entrance and exchanging some of the land where the entrance is currently located should be given further study and discussed with affected landowners.

An internal trail system will provide hiking and bicycling opportunities throughout the park. Along the river, trails will provide controlled access to the more resilient habitat areas. Priority improvements would be the removal of the lower road along the river (to be replaced with a single road to the river with a turnaround to provide access for fishing and canoeing), and restoration of indigenous species of riparian vegetation along both sides of the river. Uses along the river should be limited to the river-dependent activities such as fishing, canoe access, and nature observation. Another important use of the river area will be the interpretation of the natural and historic resources situated in the park, particularly the importance of the river to Native Americans.

DPR is planning a trail to connect Lost Lake Regional Park with Millerton Lake State Recreation Area and the state fish hatchery to the northeast, but the precise alignment remains undetermined. The actual location of the trail will be decided by DPR. Lost Lake Regional Park will serve as an important staging area for the multipurpose trail that will connect it to other parkway facilities downstream.

Woodward Park/Highway 41. The existing extent of Woodward Park will remain the central part of this recreation area. The plan proposes to expand the park by acquiring the land between the existing park and the river. This land may be initially mined for sand and gravel, which will create opportunities through the reclamation process to shape the land for conversion to park uses. This may include one or more lakes for boating, swimming, fishing, and as wildlife habitat. The lakes can also serve as buffer between the wildlife corridor and human activity in the park. If hydrologically feasible, the lakes could be connected to the river to maintain water quality in the lakes.

The Fresno Metropolitan Flood Control District has constructed a half-mile long outfall channel from Woodward Bluffs and through the proposed Woodward Park expansion. The District intends to plant the channel with trees to assist in desilting storm waters. If the area is mined, it may be necessary to relocate or reconfigure this facility or, possibly, eventually incorporate the reclaimed areas in the desilting facility.

The scenic Woodward Bluffs to the northeast of Woodward Park, beyond Copper Avenue, are becoming an extension of the park, providing trails and scenic overlooks. This narrow strip of land is owned by the County of Fresno, and a trail is being undertaken jointly by the City and County. An equestrian facility is proposed on land just downstream from Highway 41.

A canoe put-in/take-out is proposed within the Woodward Park addition; a canoe and fishing access area is proposed on the Madera County side, opposite the terminus of Avenue 10.

Plans for the Woodward Park recreation area should be coordinated with the expansion of Highway 41 to freeway standards and the construction of a new highway crossing.

Scout Island. Scout Island is a parcel of land fronting on a bend in the river between the Fig Garden Golf Course and the San Joaquin Country Club. As the name implies, it was formerly used as a Boy Scout camp and is now proposed for acquisition for controlled public use, under permit only, as a group camping area. No land access for day use of the area would be authorized. Existing public access to the property runs along the west boundary of the Fig Garden Golf Course. Any improvement of this access should be limited to the minimum necessary to

accommodate group camping. Also proposed at this site is a canoe rest area, which could also provide access for campers arriving and departing via the river.

An opportunity exists for significant revenue for the parkway if the parcel immediately south of Scout Island can be acquired. This parcel could accommodate an additional nine golf holes and would be suitable to lease to either the Fig Garden Golf Course or the San Joaquin Country Club.

Highway 99. Another recreation area is proposed on the east side of the Highway 99 crossing of the river. Day-use activities, a trailhead, and a canoe put-in/take-out are proposed on the Madera County side of the river on a bench above the river, with access most likely to be provided via Avenue 7 and Road 35. This area will provide access to the river for fishing and canoeing, picnic areas, and trails.

A long-term lease should be entered into with the Pacific Gas and Electric Co. for continued and expanded recreational uses on its land adjacent to the Hemdon substation. Because of current uses of this area and plans for light industrial uses nearby, the most intensive recreational uses of the parkway can be accommodated here.

The existing equestrian facility should be improved and access to it from Herndon improved, including the provision of a staging area and trailhead designed with the needs of equestrian trail users in mind.

The P.G.& E. site should also be considered for a full-service campground with recreational vehicle hookups, serving area visitors and in-transit travelers. The site would be suitable for supporting retail, such as a campers' grocery store.

A loop trail can be established to connect the P.G.& E. site and the day-use area on the Madera County side with the replacement of the old sand and gravel bridge below the Highway 99 crossing with a trail bridge upstream and the construction of a new trail bridge across the river adjacent to the Riverside Municipal Golf Course. This loop trail, together with the trailhead on the Madera County side and the equestrian staging area will serve as the western terminus of the multipurpose trail that will continue east to Millerton Lake. An internal nature trail can provide access to a small natural area in the riverbottom for day visitors and campground guests.

Skaggs Bridge Regional Park/Highway 145. The existing regional park, which is on the Fresno County side, should be redesigned with improvements to existing facilities. Improvements – such as reorganized parking, fencing where needed to curtail trespass on adjacent private land, new river access in less erodible streambank areas, picnic facilities, and new planting – will restore the park to a quality recreation facility with significantly reduced impacts to surrounding agricultural operations. Due to its isolated location, vandalism and other undesirable activities continue to occur. There should be a visible increase in surveillance by parkway maintenance personnel and rangers. "Park Watch" signs should be used to encourage park visitors to report suspicious activities; quick response by law enforcement personnel is essential to restore public confidence in public management of this recreation area.

Other Facilities

There are several recreation facilities that are in addition to the five recreation areas described in the preceding section. These include private recreation areas such as the golf courses and fishing areas.

Coombs and Gunner Ranches. Picnics and outdoor receptions, charitable events, and private parties by organized groups under permit from the landowner are currently accommodated in a large oak woodland near the riverfront on the Coombs Ranch. This use should be encouraged and perpetuated as supportive of the parkway.

In order to meet future residential growth expected to occur in Madera County east of Highway 41, low impact recreational opportunities could be provided through the future acquisition of an

area for picnics and limited day-use on a 15- or 20-acre portion of the immediately adjacent Gunner Ranch. Providing trailhead facilities (parking and sanitation) in a single place would minimize access routes to the river being developed indiscriminately by future residents of the area. The trail originating in the day-use area could connect the future residential areas with the trail system extending from Rank Island to other areas of the parkway.

San Joaquin River Ecological Reserve. Acquired by the state Wildlife Conservation Board and operated by the California Department of Fish and Game, the San Joaquin River Ecological Reserve is intended to consist of several units along the San Joaquin River. Currently there are two units: the Milburn Unit, east of Highway 99; and the Willow Unit, midway between Highway 41 and Friant. The Milburn Unit, site of a former sand and gravel operation, is in a degraded condition. DFG plans to restore the land for fishing and wildlife habitat. Internal trails and controlled boating activities may also be included.

The Willow Unit consists of riparian areas, oak woodland, and ponds created by former sand and gravel operations. It contains a variety of good wildlife habitat, some of which may be environmentally sensitive. Recreation activities such as hiking and canoeing may be accommodated in areas that are less sensitive. A central access point or entrance area at Friant Road will minimize inappropriate or unauthorized access to sensitive areas. The entrance area is proposed to feature an environmental education center that will be designed and sited to be essentially unobtrusive to wildlife.

Both units are situated close to junctions with feeder trails identified in city and county plans for the Fresno County side.

DFG is in the process of developing a management plan for both units. It is assumed that DFG will consult with the managing entity for the parkway but will retain primary responsibility for planning and developing the units.

Spano Property. This land, which is immediately downstream of the Highway 41 crossing, is suitable for an 18-hole golf course and an equestrian facility. Much of the land has been reclaimed from sand and gravel mining operations. Existing lakes and revegetated areas will provide a buffer between the golf course and the wildlife corridor. Access would be provided via Nees Avenue.

Moen Lakes Fishing Area. Numerous lakes created from sand and gravel extraction on the Madera County side in the vicinity of the westerly extension of Nees Avenue are currently available to the public for fishing for a small day-use fee. As additional lakes are created on the Moen property, it would be desirable if they were also stocked, as there appears to be considerable demand for this recreational activity. If the owner no longer wishes to operate the fishing lakes, consideration should be given to a public agency acquiring the property.

The area upstream of the bridge currently used as a haul route used in Stuart and Nuss' mining operations, is proposed for a combined canoe rest area and put-in/take-out area. This area also provides a logical point to link the multipurpose trail along the river and a feeder trail originating in the vicinity of Nees Avenue.

Trails and Bikeways

Trails and bikeways will be the connecting elements that create an integrated, regional recreational system out of the separate pieces of the parkway. Many pieces of the parkway already exist, needing only the trail to connect them. Due to the many ownerships involved and the scale of the project, considerable time will be required before all segments of the trails and bikeways are complete. When completed, there will be a continuous, multipurpose trail of approximately 21 miles, extending from the outskirts of Millerton Lake State Recreation Area, near the town of Friant, to the Highway 99 crossing, where the multipurpose trail would terminate with a 2-mile loop. The managing entity will need to develop a logical sequence of construction

phases for trail and bikeway segments in order to maximize their utility as the trail and bikeway network emerges over time.

A hierarchy of trails and bikeways will provide a variety of recreational opportunities for hikers, joggers, walkers, bicyclists, and equestrians, as well as providing alternatives to the automobile for travel to the parkway via feeder trails and bikeways serving areas adjoining the parkway. Trails will range from the wide multipurpose trail to narrow, unpaved footpaths. The multipurpose trail will provide a spine route linking portions of the parkway. Internal trails will provide loop opportunities within the recreation areas. Footpaths will provide access to wildlife reserves for nature observation and fishing.

Where possible, trails in the parkway should connect to existing trails and other facilities. Parkway trails should also be planned to anticipate future trails such as those proposed in the Master Multi-Purpose Trails Manual (1990) prepared for the City of Fresno and the Council of Fresno County Governments. The Trails Manual identifies potential trail corridors, including a trail in the riverbottom, and others that would provide access to the parkway. Potential feeder trails are identified along the following corridors: Milburn Avenue, North Van Ness Avenue/Boy Scout Road, Audubon Drive/Palm/Harrison, Woodward Park, North Friant Road/Audubon Drive/North Fresno Street, East Copper Avenue, North Willow Avenue, and where Little Dry Creek meets Friant Road.

Two feeder trails and trailheads are indicated on the Madera County side at the upper end of Ledger Island and on the Gunner Ranch. It is not possible to recommend a precise location for these feeder trails, as future development plans for the areas northwest of the river will determine the particular alignments of feeder trails providing access to the parkway. No public road access to these trailheads currently exists, and none probably will be provided until some of the surrounding area is developed.

Local and regional trails should be connected to create a regional trail network. A trail network can serve both recreational and transportation purposes. When connected to local trail systems serving residential areas, automobile use to the parkway can be reduced. Public transit should also be planned to provide access to trailheads and parkway staging areas.

There are several trails along the parkway that are now being planned. The City of Fresno and Fresno County are collaborating on the Woodward Bluff trail, which will extend northeast from Woodward Park on the scenic bluff lands along Friant Expressway. Other trails near Woodward Park are under consideration, including a trail providing access to the river from Woodward Park. The California Department of Parks and Recreation is in the process of planning a trail between Millerton Lake State Recreation Area and Lost Lake Regional Park. This plan tentatively depicts this trail parallel to the river on the Fresno County side. The actual location of the trail will, however, be decided by DPR in a planning process that is separate from this parkway plan.

The recommended locations of parkway trails reflect the following concerns:

- Avoidance of steep grades whenever possible.
- Avoidance of cutting new routes into the erodible bluffs.
- Minimization of distance through natural reserves, skirting as much of the wildlife corridor as possible, and avoidance of environmentally sensitive areas.
- Avoidance of existing residences and agricultural operations.
- Avoidance of land uses that pose a hazard, such as aquaculture ponds or a sand and gravel operation.
- Utilization of some existing trails and unimproved roads.

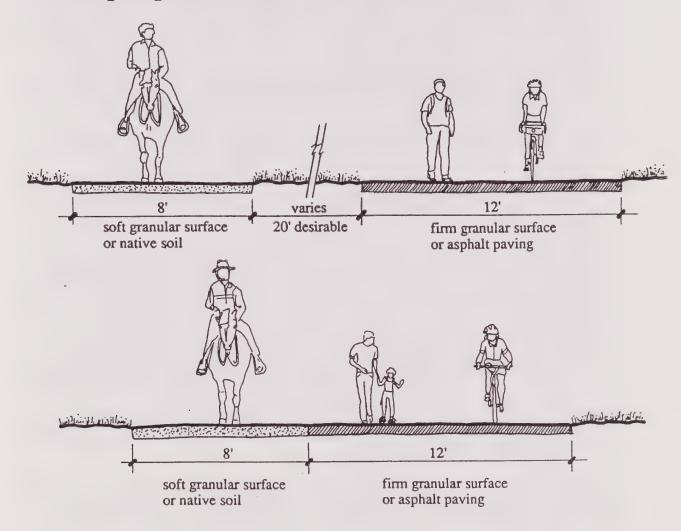
Trail Standards/Guidelines. The multipurpose trail will serve most of the parkway between Highway 99 and Friant Dam. Where feasible there will be separate, parallel trails, one with a firm granular or paved 12'-wide surface for cyclists, persons in wheelchairs, and other users preferring a hard surface; and one with a soft granular or native soil 8'-wide surface for equestrians and hikers. Where separate trails are not possible, an extra-wide single corridor trail will accommodate all users. The single trail will include a 12'-wide firm granular or asphalt section and an 8'-wide soft granular or native soil shoulders on one side. There may be some areas where there is not sufficient width to construct the entire trail as outlined above, such as along levees or tracks where native vegetation should not be removed. Multiple use can still occur on these sections by use regulations such as speed limits for bicyclists or continuing current practices in the area by requiring bicyclists to dismount in the vicinity of equine riders. Proper signs and enforcement will make these regulations more effective.

Asphalt paving should be considered for segments of the multipurpose trail that are expected to receive heavy traffic in a few years after being opened to use, such as the segment along Woodward Bluffs between Woodward Park and East Copper Ave. For most of the rest of the multipurpose trail, however, a granular surface of decomposed granite or crushed quarry fines can provide an excellent trail surface at lower cost and may be a more appropriate surface for the parkway from environmental and aesthetic perspectives. If well constructed, granular trail surfaces can provide a smooth, firm surface that is suitable for all trail uses, including bicycles and wheelchairs. The trail surface will be suitable, and wide enough, for use by patrol, maintenance, and rescue vehicles. Much of the route between Highway 99 and Friant Dam will be located on existing gravel tracks or haul roads, which can be easily converted to trail use. The multipurpose trail will also serve as maintenance and security patrol access. Barriers will prevent access by unauthorized vehicles, while gates will provide access for maintenance and emergency vehicles.

The internal trails within the recreation areas will provide loop trails of various lengths. Widths and construction methods can vary with potential use levels, but any multiple use trail should be at least 12' wide to accommodate pedestrian, bicyclist, and equestrian uses safely. Low impact footpaths that provide access to natural reserves will generally permit only pedestrian use, and can be as narrow as 24" and surfaced with native soil.

Typical trail cross-sections for the parkway are illustrated in Figure 6-2, on the next page.

Multipurpose Trail



Low-Impact Footpath



Figure 6-2

Bridges. During the course of the planning process concerns were expressed about the cost of multipurpose trail bridges across the river and the potential effect of the bridges on floods. The principal factors affecting cost are width of the river and soil conditions at the footings. Quotations⁷ on two different size bridges were obtained. A prefabricated steel bridge 60' x 10' with wooden decking costs about \$14,000; one that is 100' x 8' costs in the range of \$30,000 to \$35,000. In ideal soil conditions, footings can be constructed for \$5,000 each; the worst case conditions expected on the San Joaquin River could cost as much as ten times that. (DPR estimates an average cost of \$60,000 for footings and a 12' x 60' steel bridge on the San Joaquin.) The 8'-wide bridge can be used by typical patrol, maintenance, and rescue vehicles. The additional cost of anchoring the bridge more strongly against flood flows is negligible.

A new bridge will not be required in every instance. A heavy-duty concrete bridge (constructed for sand and gravel hauling) connecting Ledger Island with the Fresno County side is incorporated in the alignment of the multipurpose trail. As aligned in this plan, the the multipurpose trail will require eleven new bridges. Using DPR's average per-bridge cost, \$660,000 would be required (in current dollars) to complete construction of all bridges. This expenditure would be spread over possibly as much as two decades as the multipurpose trail moves toward completion.

However, fully 10 miles of the multipurpose trail can be constructed between Lost Lake Regional Park and Woodward Park with only one new river bridge needed to complete the trail segment.

Bikeways. In this plan, "bikeways" refer to on-street bicycle facilities that use existing roads and right-of-ways; they are distinct from trails, which are separate from roads. Bikeways will provide continuous routes for bicyclists in areas where trails do not exist or do not permit bicycle use. Bikeways will provide access to the parkway from surrounding areas. A Class II bikeway (California Department of Transportation standards) is a dedicated bike lane on a road. A Class III bikeway is a signed bike route on a road (a Class I bikeway is a bike path separate from roads and is referred to as a multipurpose trail in this report). Parkway trails and bikeways will serve a wide variety of bicyclists. Children and families will seek bikeways that are safe, have little traffic, provide short loops (5 to 10 miles), and are scenic. Recreational and touring bicyclists will seek longer scenic routes (20 to 50 miles). Fitness and commuter bicyclists prefer efficient, high-speed routes, and may avoid busy trails.

Between Highways 145 and 99 there are no trails proposed along the river because of the existing agricultural uses and low demand for this kind of recreational facility in this area. If future land use patterns change along this section of the parkway, a trail along the river or bikeways (if safe) should be considered.

As development increases on the lands surrounding the parkway, the nature of trail and bikeway use may shift, with transportation uses (e.g., commuting by bicycle) becoming greater in relation to purely recreational uses of trails. The American River Parkway in Sacramento has seen a great increase in the use of trails for transportation as the lands surrounding it have been developed. Planning and management for the San Joaquin River Parkway trails should consider their potential role for transportation as well as recreation and should provide for feeder trail connections with both uses in mind.

Staging Areas. Vehicle parking and access to trails are provided at staging areas. Most staging areas will be within the recreation areas. Staging areas consist of a parking area, barrier, and gates providing access for trail users while barring unauthorized vehicle access, and informational and interpretive signs. Other staging area features include toilets, drinking water, and telephones for reporting emergencies. Staging areas that serve equestrian trails should provide drive-through trailer parking, watering troughs, and hitching posts.

⁷ Quotations were obtained from Hallsten Supply Co., of Sacramento.

Trail Corridors and Buffers. Trail corridors should be of sufficient width to preserve a scenic environment for users and to minimize impacts of trail use on wildlife and their habitat and on adjacent land uses. The width will vary with terrain, vegetation, and land availability. Where feasible, a minimum width of 100' should be acquired for trail corridors. Existing vegetation or new plantings of native vegetation should be used as a buffer, or additional distance provided in open areas where new planting is not feasible.

Canoe Facilities

The parkway will provide new and enhanced opportunities for canoeing on the San Joaquin River. The river, various side channels, and many of the remnant sand and gravel lakes provide opportunities for canoeing. Most of the canoeing in the river is "flat water", requiring fairly constant paddling due to the slow current. The experience of boaters on the river will be different than that of any other parkway user. Large segments of the river are enclosed by riparian vegetation, screening adjacent uses.

To support canoe use, new facilities should be provided to enable canoe trips. Access areas for put-in and take-out are planned for several locations along the parkway, primarily within the recreation areas. They are situated to permit canoe trips of various lengths, from 2-3 hour trips to full day trips. The put-in/take-out areas will consist of a vehicle parking or drop-off area that is close to the river, with sanitation facilities, drinking water, and telephone. Informational signs will include a map of the river showing the locations of take-out points and rest areas. Canoeing regulations and safety information will be included to educate canoeists. Interpretive information can explain the natural history of the river as well as encourage low-impact recreation near sensitive wildlife habitats.

Rest areas consisting of sanitary facilities, picnic tables, and litter receptacles will be provided at selected areas where canoeists can rest en route and use toilets without trespassing on private land. Access for canoe put-in or take-out will not be provided at rest areas, but they will be accessible by patrol, maintenance, and rescue vehicles.

Because of limited public demand, no sites for canoe facilities are proposed between the Highway 99 crossing and Skaggs Bridge Regional Park. The length of this reach of the river would suggest that eventually two rest areas would be desirable. These rest areas should be provided when demand warrants or if they would reduce indiscriminate conduct on adjacent private lands.

Canoe use requires a minimum amount of water to provide enough depth. The water level is controlled by the amount of water released at Friant Dam. During dry periods, just enough water is released to satisfy the downstream water right demands. Increasing releases from Friant Dam to maintain a flow of approximately 200 cubic feet per second in the river would provide a sufficient, though minimal, amount of water for canoeing in dry periods. Securing the funding to reroute some of the Madera Irrigation District's water deliveries through the river, rather than its canal, to maintain a minimal flows in the river for canoeing, would significantly enhance this important recreational use of the parkway.

Increased canoe use may have impacts on the river, wildlife, other parkway visitors, and nearby residents. Impacts of all types of recreation should be monitored and appropriate regulatory or managerial responses made by the managing entity. In particular, some concerns have been expressed over the increase in rafting on the Kings River that has resulted in problems such as drunkenness, vandalism, and violence. Because the San Joaquin River's flow is much slower than the Kings', rafting it would require nearly constant paddling effort, making it fairly unattractive for a floating beer party. Moreover, it seems unlikely that canoes will provide much of an opportunity for floating beer parties. Although a canoe can maintain progress on the river with less paddling effort, compared to a raft it is not as suitable for a beer party because of its smaller capacity (usually not more than 3 adults), the need to pay attention to steering it, and the relative ease with which it can tip over, even on calm water. If necessary, alcohol use and possession could be banned from all of the canoe access points to reduce these problems.

Equestrian Facilities

The demand for equestrian facilities is expected to be high and the parkway will provide new opportunities for equestrian use, which will require special facilities and management. Some facilities may be private; others may be provided through concession operations on public land. The equestrian centers will include boarding facilities, trailer parking, and training areas. Access to the existing equestrian center on the P.G.& E. property needs to be improved; this can be coordinated with the redevelopment planned for Hemdon. Access to a proposed equestrian center near the Highway 41 crossing will probably be provided via Nees Ave., an area that is also under consideration for redevelopment.

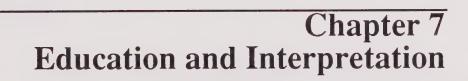
Most equestrian use will occur in the section between Highways 99 and 41, where there will be equestrian trails with equestrian centers at each end of the section. Where possible, separate trails will be constructed for equestrian use. Multiple-use trails that permit equestrian use will have wide equestrian shoulders to minimize conflicts with other trail users. Trails permitting equestrian use will avoid sensitive habitat areas, wetlands, and areas undergoing revegetation. Maintenance should stress control of introduced exotic plant species. The trailheads will include maps showing trails and areas where equestrian use is permitted and regulations concerning equestrian use.

Private Recreation Facilities

Private recreation facilities will continue to play a role along the parkway. Privately operated golf courses, beach clubs, fishing areas, equestrian clubs, and other recreational facilities will help meet the recreational needs of the Fresno-Madera community. In most cases these operations would be compatible with the goals of the parkway, but they need to conform to buffer requirements for the wildlife corridor and wildlife reserves and to meet other requirements, such as outdoor lighting and water runoff controls.

Large-scale, high-intensity use facilities, such as waterslides, amusement zones, or any recreational pursuit involving motor vehicles or motorized watercraft (other than electric trolling motors on fishing boats), are not compatible with the parkway or other uses currently found in the riverbottom. Spectator events or other large assemblies should not be allowed on private lands and should be limited to recreation areas on an occasional basis, with use levels monitored to assure that the carrying capacity of the site is not exceeded.

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EDUCATION and INTERPRETATION

One of the most important qualities of the San Joaquin River Parkway will be its value as an educational resource. Education should be viewed as a lifelong process, and education programs should be geared to people of all ages. The entire river and surrounding landscape can be both textbook and classroom. A visitor center or museum building may provide a central facility for the educational programs, but educational activities should occur along the entire parkway. Learning about the natural systems and history of the river area is more exciting when it occurs in the out of doors, rather that in a classroom or museum building. All parkway facilities should be evaluated from the perspective of their potential for education or interpretation.

Currently, educational use of the river is limited to a few locations, primarily at Lost Lake Regional Park. The California Department of Fish and Game is establishing programs on the recently acquired properties that make up the San Joaquin River Ecological Reserve. Expanding the areas open to educational programs will greatly increase the range of themes that can be used.

Educational and interpretive programs can include a wide variety of activities and forms. Interpretive signs, brochures, and regular programs such as hikes and bicycle rides can reach the casual visitors. Scheduled activities, school tour programs, and research programs can serve visitors that come to the parkway for educational purposes. Some activities can be run by agency staff, but a successful educational program offering a wide variety of activities needs a good supply of dedicated volunteers. A strong tradition of volunteerism already sustains an effective education program featuring the river's natural and cultural/historical resources.

The educational and interpretive programs should be developed to highlight the diversity of features and uses of the river. Each interpretive site should have a focus that features interrelated elements of the interpretive themes. Themes should relate and be appropriate to the immediate area of the interpretive site in the parkway. For example, the sand and gravel uses of the river should be interpreted where sand and gravel operation can be viewed or where there is evidence of past mining, habitat restoration should be interpreted at a restoration site, and interpretation of the natural resource or wildlife values of the river should not be conducted at a manicured park.

Educational and interpretative programs can include:

- museum/visitor center exhibits
- interpretive walks/bicycle rides conducted by agency staff or volunteers
- regular programs for school groups
- · "outdoor classroom" school programs
- self-guided brochure tours
- interpretive signs at points of interest
- scientific research programs
- theme trails: agriculture, nature, history

Numerous themes have been identified that can potentially be used in educational and interpretive programs:

- the San Joaquin River statewide importance formation/geology the water resource
- the San Joaquin Valley statewide importance formation/geology

- natural resources
 wildlife
 vegetation
 value as wildlife habitat
 ecology of flora, fauna, and the river
 environmental restoration of the river
- cultural/historic themes
 Native American habitation
 early homesteaders
 development of agriculture
 "bread basket of the world", wheat production for export in late 1800's
 development of the wine/raisin industry
 river as "playground" of early Fresno
- agriculture of the San Joaquin Valley irrigation/canal systems variety of agriculture economic value of agriculture fertility of floodplain deposits farm implements
- sand and gravel resource mining operations uses and value of sand and gravel mined land reclamation
- the San Joaquin River Parkway creation of the parkway the need for the parkway importance of land and water conservation

Educational programs within the parkway can and should be conducted by a variety of organizations, including schools, universities, environmental and history groups, art groups, park associations, the parkway managing entity, and other public agencies such as the California Department of Parks and Recreation, the California Department of Fish and Game, and county and city parks departments. The managing entity should seek cooperative relationships with all these organizations to encourage a variety of programs to reach all segments of the community. Non-profit organizations and volunteers will play a large role in providing these programs.

The Madera Unified School District, Fresno Unified School District, Fresno County Office of Education, Clovis Unified School District, and the San Joaquin River Parkway and Conservation Trust have cooperated for the last four years to form an interdisciplinary environmental education program using the river as an outdoor laboratory. Lost Lake Regional Park is the only public access to the river for this program. This program and similar educational opportunities should be expanded by improving access to different parts of the river.

In addition to the specific lessons in biology and history, the most important lesson for school children may be understanding of the value and fragility of natural environments. This is particularly important in the Fresno-Madera region, where the students come from a wide range of cultural backgrounds, all with different attitudes toward, and experiences with, the natural world. While most of the school activities should occur in the field, a nature education center can provide a place for presenting lessons, exhibits, and hands-on materials. This center can also function as a facility to introduce other visitors to the parkway and its natural and cultural resources, especially the many sites throughout the parkway associated with Native Americans.

The following sites in or near the parkway seem most suited for featuring the following particular educational and interpretive programs:

- Williams/Phillips House:
 agriculture and horticulture
 sand and gravel, its uses, economic importance, role of reclamation
 geology of the San Joaquin River
- Lost Lake Regional Park:
 nature study
 environmental education
 Native American culture
 parkway and conservation values
 introduction to the parkway
- Willow Unit, San Joaquin River Ecological Reserve interpretation of the adjoining wildlife reserve environmental restoration ecology of the river and riverbottom nature study environmental education parkway and conservation values Native American culture
- Milburn Unit, San Joaquin River Ecological Reserve environmental restoration and sand and gravel reclamation ecology of the river and riverbottom nature study
 environmental education parkway and conservation values
- San Joaquin Fish Hatchery
 fisheries management
 hatchery operations
 resource conservation and fishing regulations
 human interaction with the environment
- Highway 99 Recreation Area
 nature study
 parkway and conservation values
 introduction to the parkway
 introduction to the Fresno-Madera metropolitan area

Interpretation and education need not rely on a structure or a formal program. Educational and interpretive programs can be effectively supplemented through the placement of interpretive signs and display panels with brochure racks at recreation areas and other points of access to the parkway.

Colleges and universities can have a mutually beneficial relationship with the parkway. The river could become an outdoor laboratory for research in biology, hydrology, archaeology, history, and education. The research can benefit the parkway by monitoring natural processes, providing a better understanding of the river's history, and providing recommendations for resource management. A field station could be established to support research activities. A portion of the parkway could be set aside expressly as a place for university-level research, under a program such as the Natural Reserve System of the University of California. Once a siting decision on a new U.C. campus has been made, university interest and potential involvement should be ascertained. Because this decision remains very tentative, this plan does not designate locations for the field station or research areas.

Interest in the community remains strong for the establishment of a state agricultural museum. A site has been reserved on the campus of California State University, Fresno. Should the CSU Fresno site not be used for the state agricultural museum, consideration should be given to siting the main museum near the parkway. If adequate frontage road access remains after construction of a new Highway 41 crossing to freeway standards, a good site for the main museum can be found on the Madera County side of the river immediately north of the trailer park on the east side of Highway 41. The state agricultural museum on this site would be complemented by existing direct sales of agricultural products there.

Community organizations such as environmental, history, and art groups can provide expertise and volunteers for a variety of education, research, and interpretive programs. These activities may provide the widest variety of programs and the best opportunities to attract area residents to the parkway. The community organizations should be given the freedom and opportunity to develop their programs as long as they are consistent with the goals of the parkway.

Chapter 8
Managing Entity



MANAGEMENT NEEDS

Although the parkway encompasses an extensive area, it would ordinarily be capable of being operated and managed by county government or a special purpose district with adequate financial resources, were it situated in a single county.

Several factors, which have a bearing on the question of what would constitute an appropriate managing entity for the parkway, emerged in the course of the planning process:

- 1. Effective law enforcement within the parkway is a high priority with landowners as well as parkway advocates. Both counties have a generally slow response time up to three hours in some cases to reports of incidents of unlawful or indiscriminate conduct in the riverbottom. Also, there is concern about providing better access to the parkway by fire and emergency medical vehicles, should public usage increase.
- 2. Local jurisdiction over the riverbottom is divided among the County of Fresno, the County of Madera, and the City of Fresno. These political boundaries are, of course, not relevant to retaining the integrity of the river's natural resources or maintaining an intact ecosystem in the riverbottom. Having different jurisdictions and policies can impede efforts at managing the river as an ecological unit.
- 3. The State already has substantial property interests in the riverbottom. The California Department of Fish and Game acquired two major parcels (the Milburn and Willow Units) for the San Joaquin River Ecological Reserve. The California Department of Parks and Recreation operates Millerton Lake State Recreation Area and is planning a trail below Friant Dam, to connect the state recreation area and Lost Lake Regional Park. The reaches of the San Joaquin River that are proposed for the parkway are capable of being used by small human-powered recreational watercraft, and the California Department of Boating and Waterways supports enhanced recreational boating uses on the river. The State Lands Commission is studying evidence to determine the extent of the State's property interests in the river bed and the extent of the adjacent private lands subject to a public trust easement.
- 4. Consistency in management, land acquisition, and natural resource protection policies are preferred to the current fragmented approach.
- 5. The County of Madera does not have a parks department or other agency with responsibility or funding for the parkway. The County of Fresno has a small, underfunded parks department that has had to curtail services and defer even relatively minor improvements.
- 6. The Fresno Metropolitan Flood Control District has the authority and some financial resources to participate in land acquisition in ways that complement its main mission while also meeting some parkway land acquisition priorities.
- 7. There is no single local public agency with the authority or financial capability to engage in land exchanges and other complicated land transactions that might involve lands in both counties or to hold and manage habitat lands in a mitigation bank.

TYPES of MANAGING ENTITIES

Two possible solutions to meeting these needs are the creation of a regional park and open space district or an agency for the joint exercise of powers. Each, however, has significant limitations, when applied to the circumstances of the proposed parkway.

JOINT POWERS AGENCY

A joint powers agency could be created as a voluntary contractual relationship by the state and local agencies with responsibility for or interests in the river. However, JPAs are impermanent and generally much better suited for the accomplishment of a single project, rather than assuming long-term operational responsibilities. Without special legislation, it is doubtful that a parkway JPA could raise revenue effectively. Failure to adopt financing measures in one jurisdiction would frustrate implementation of the parkway. Perhaps most importantly, the two counties do not have any prior experience conducting joint ventures through JPAs.

REGIONAL PARK DISTRICT

A regional park and open space district could be formed in all or part of both counties without having to amend existing state law, so long as the district consists of at least one city and the proposed territory of the district has a population over 50,000. Legislation would be necessary, however, to provide for appropriate representation of local governmental interests on the district's board of directors. While this approach could solve the bi-county problem, it would not directly accommodate the potentially significant roles of several state agencies and the flood control district in the funding and management of the parkway. Facilitating joint land acquisition and management efforts involving state and local public agencies is essential to the success of the parkway, but a regional park district is not suitable for meeting this need, as it is a fundamentally local agency with limited powers.

LOCALLY-BASED CONSERVANCY

As a third alternative, consideration should be given to solving the regional jurisdictional problem by creating through state legislation, in parts of both counties and with local representation on its governing board, a new public agency to acquire and manage parkway lands, which could be called the San Joaquin River Conservancy.

There are currently four conservancies in the state, each designed to meet land conservation needs peculiar to the area where each has jurisdiction, but all possess many similar characteristics.

The **State Coastal Conservancy** owns and manages important coastal resource lands and finances projects to improve public access to the coast, enhance natural resources in the coastal zone, etc.

The Santa Monica Mountains Conservancy operates in Ventura and Los Angeles Counties and has purchased large blocks of recreational lands for conjunctive management with the state and federal governments and has begun a major trail project to encircle the San Fernando Valley.

The California Tahoe Conservancy is also a bi-county agency whose main mission is to acquire environmentally sensitive lands and other lands which, if developed, would contribute to degradation of Lake Tahoe's water quality through silt and nutrient runoff.

The recently created Coachella Valley Mountains Conservancy includes Palm Springs and eight other desert resort cities in Riverside County that want to acquire and manage surrounding mountainous lands for their scenic, wildlife habitat, and Native American cultural values.

All but the Coachella Conservancy are state agencies that receive state funding.

State legislation to create the San Joaquin River Conservancy should be generally based on, and take advantage of the experience with, the legislation that created the four existing conservancies, with appropriate adaptations to meet the particular needs of the parkway.

Such legislation could have the following features:

Territory

To spread its costs equitably and broadly among the population being served by the parkway, the conservancy's territory should include the urbanized and urbanizing areas in the central portions of Fresno and Madera Counties. Due to their distance from the parkway and their much sparser populations, the predominantly rural areas in western Madera County and southwestern Fresno County and from the foothills to the crest of the Sierra Nevada should not be included. In no event should any population center in either county be included in the conservancy's territory if it is farther than a one hour's drive from the parkway.

The conservancy's territory would constitute the "parkway service area", i.e., those portions of Fresno and Madera Counties in which an election for a general obligation bond issue or special tax would be conducted at the initiative of, and by, the existing local governments having jurisdiction over all or part of the parkway service area. Similarly, any benefit assessment would be limited to that area.

This plan does not delineate the conservancy's territory. Precisely delineating the conservancy's territory could be accomplished in the legislation creating the conservancy. Typically, a boundary map is incorporated by reference into the legislation or the legislation sets forth criteria to be applied by local governments (or the conservancy itself) in determining the precise location of the boundaries.

The conservancy's operations and maintenance activities would occur primarily within its administrative jurisdiction. (As a practical matter some conservancy operations would involve adjacent areas, as when, for example, effective law enforcement necessitates parkway rangers taking enforcement action outside the administrative jurisdiction.) The administrative jurisdiction would consist of land and water areas acquired for the parkway, whether by purchase, lease, easement, etc.; other public lands operated by the conservancy on behalf of another public agency; and private lands which, for example, are in a mitigation bank and the owner desires the conservancy's management and protection services or which have been voluntarily placed in a resource management agreement with the conservancy. (A more detailed discussion of mitigation banks and resource management agreements appears in Chapter 9.)

Relationship to other Public Agencies

The primary purpose of the San Joaquin River Conservancy would be to provide an institution to coordinate, and assure consistency in, the activities of the state and local public agencies and private entities with interest or responsibility for the river and its resources. State and local agencies would retain title to the land they own⁹.

⁸ Two distinct areas within the "parkway service area" are also recognized in this plan: the riverbottom and a "special benefit zone", which extends approximately 2.0 miles out in either direction from the blufftops. These areas are designated to provide for different amounts of assessments or fees that reflect the different level of benefit enjoyed or impact to the parkway by development in those areas, based on their locations relative to the parkway. See Chapter 10 for a more detailed discussion of parkway finances.

⁹ An exception is the possibility that the County of Fresno might want to transfer operating responsibility and ownership over Lost Lake Regional Park to the California Department of Parks and Recreation, for operation in conjunction with Millerton Lake State Recreation Area. (Part of Lost Lake Regional Park was acquired a number of years by the state Wildlife Conservation Board.) Savings from this transaction could be redirected to county park operations at Skagg's Bridge Regional Park.

The conservancy could cooperate with the California Department of Fish and Game in the operation of its ecological reserve lands and otherwise support its mission, and could assume, pursuant to contract, some existing county and city park management responsibilities and, possibly, also state park operations. For areas of the parkway where there is no state or local public agency with operating and management responsibility, the conservancy would assume that responsibility. Thus, at least initially, the conservancy's operations and management responsibility would mainly involve law enforcement and facilities maintenance along the multipurpose trail and the wildlife corridor. The cost of constructing parkway facilities on land owned by a state or local entity would in most cases be shared, with the proportion determined by the extent to which the particular parkway facility enhances the utility of the state or local entity's land and supports the public program conducted there.

Governing Board

The most effective way to foster the coordination and consensus-building needed to acquire, operate, and manage the parkway effectively, with its different types of land uses and different public agencies with different missions, is to create a managing entity with a governing board providing broad representation of the most significantly affected state and local public agencies and the community at large.

Typically, the community is represented by citizens whose legal residence is in the conservancy's territory, who are not elected officials, and who are appointed to the governing board. These "general public" or "at large" appointments are usually balanced by approximately the same number of local officials, who are chosen by a process that reflects how the executive function is carried out in each type of local public agency that has a representative on the governing board. Together, these appointments should constitute at a least majority of the voting memberships.

The public agencies that would be most appropriate for membership on the governing board are those with one or more of the following characteristics:

- 1. Ownership of land in the riverbottom and responsibility for its ongoing management.
- 2. Legal authority to seek voter approval of taxes or otherwise provide revenue for the acquisition, development, or management of land and water areas in the parkway.
- 3. Legal authority to regulate land uses in the parkway.

One of the more important functions of the governing board would be to provide a setting for making decisions assigning particular operating and management responsibilities to particular member agencies. This process is dynamic and would be able to take into account fluctuations in funding available to its member agencies for parkway operations and changing priorities in parkway capital outlay needs.

This approach also has the practical advantage of improving communications among the member agencies simply because of the necessity that the governing board meet periodically. In addition, accountability to the general public is enhanced because the various member agencies must carry out their joint responsibilities affecting the parkway in a more public setting and in concert with other member agencies. It is often easier to overcome individual bias of each agency if all affected agencies are convened to pursue a common set of goals.

A majority of the members of the board would constitute a quorum. On an 11-member board, six would be required to form a quorum; on a nine-member board, five would be required, etc. In legislation creating new governmental institutions, the trend has been lately to require the favorable vote of a majority of the entire membership of the governing board (rather than a majority of the quorum) to take official action. Thus, with an 11-member board, at least six members would have to be present and voting to take official action. (If only a majority of the

quorum is required, four members - that is, a majority of the six present - could effectively take official action.)

Governing boards with a membership in the range of 7 to 11 seem to work best. Larger boards can become unwieldy and can experience attrition in active membership due to domination by more assertive members, who, in a large group, can monopolize the proceedings, causing the less assertive to lose interest and cease attending. Smaller governing boards are generally not large enough to provide sufficiently broad representation.

Terms are typically two or four years, and members are usually allowed to be reappointed for successive terms. The initial terms are usually staggered so that there is not a large turnover in membership when the terms expire. Any elected or appointed official who leaves office would automatically terminate his/her membership. Members who are not elected or appointed officials are typically paid per diem; all board members should be reimbursed their expenses. The chairmanship could be by election of the board or could rotate on some basis established in the legislation.

Powers

The San Joaquin River Conservancy should be granted at least the following powers in the legislation creating it:

- 1. Hire and train parkway rangers, with "front rank" peace officer status. (The feasibility of obtaining this training through the existing programs for state park rangers should be considered; any costs of training should properly be assumed by the conservancy, not DPR.) Duties would be primarily limited to parkway lands owned or controlled (through an easement) by the conservancy or another public agency and immediately adjacent private lands, but parkway rangers could pursue criminal conduct originating in the parkway and going outside it. Also, facilitate "mutual aid" and otherwise coordinate activities and duties of conservancy personnel with DPR, DFG, local law enforcement, and rescue personnel.
- 2. Adopt and enforce regulations relating to the prevention of overuse or inappropriate use of parkway lands and inappropriate activities in the parkway (e.g., alcoholic beverage restrictions, authorized watercraft types, etc.); protection and management of native riparian vegetation, wildlife, and other natural resources on parkway lands; and protection of archæological sites. Inform visitors, through direct contact, brochures, and display panels, about appropriate use of the parkway and respect for private property.
- 3. Carry out this parkway plan (and any successor plan) in accordance with the actions of local government in adopting it and develop and carry out management plans, development plans, etc. for the natural and recreational resources of the parkway. Monitor natural resources. When appropriate, comply with requirements of the California Environmental Quality Act in connection with projects in the parkway, and comment on land use changes proposed for adjoining property through rezoning, general plan amendment, a specific plan, etc.
- 4. Manage, operate, administer, and maintain the parkway and its facilities. Land acquired by the conservancy (or managed and administered by it pursuant to an easement or similar arrangement) should not be opened to public use until there is an adequate operating budget.
- 5. Employ an executive officer and such other staff and specialists to perform those functions that cannot be provided by the existing personnel of member agencies on a contractual basis or by volunteers.
- 6. Recruit and coordinate volunteers and experts to conduct interpretive and recreational programs and to assist with construction projects and maintenance of parkway facilities.

- Set acquisition priorities for, and acquire real property, or any interest in real property, 7. within the parkway "zone of interest", from willing sellers only and at fair market value or on other mutually acceptable terms between the landowner and the conservancy. The conservancy could accomplish the acquisitions itself, or it could coordinate the acquisition through a member agency or other public agencies with appropriate responsibility and available funding or land to exchange. This land acquisition authority would include authority to engage in a variety of alternative transactions; such as holding conservation easements (purchased or donated); providing technical assistance to landowners so that their development is compatible with, or enhances, the parkway; holding options; holding remainder interests in those instances where owners desire to sell but retain a life estate; creating and administering a mitigation land bank 10; and arranging land exchanges. The overall objective of the conservancy in this capacity is to assist in accomplishing land transactions that are mutually beneficial to the landowner and the parkway by adding value to the land while meeting natural resource conservation and other parkway objectives. Some of the various alternative transactions that are possible are described in more detail in Chapter 9.
- 8. Undertake site improvement projects; regulate public access; revegetate and otherwise rehabilitate degraded areas, in consultation with other public agencies with appropriate jurisdiction and expertise; upgrade deteriorating facilities; and construct new facilities as needed for outdoor recreation, nature appreciation and interpretation, and natural resource protection. These projects could be undertaken by the conservancy itself or by member agencies, with the conservancy providing overall coordination through setting priorities for projects and assuring uniformity of approach. Consideration should be given to authorizing the conservancy to make grants of its funds to member agencies and to nonprofit organizations and other public agencies that can assist in parkway projects.
- 9. Administer funds received from the state, revenue generated by local governments for the parkway, and user fees and other income to the parkway for capital improvements, land acquisition, and the support of the conservancy's operations.

It should be noted that there is no mention of authorizing the conservancy to control land development through zoning, specific plan approvals, and the other usual incidents of municipal land use authority. The legislation should clearly affirm this relationship between the conservancy and local government. All zoning and other land use control should remain the exclusive authority of the Counties of Fresno and Madera and the City of Fresno, but all jurisdictions should take steps to coordinate their actions and have consistent treatment of lands within the parkway.

Moreover, the creation of the conservancy would not result in a legal vacuum. Concerns have been expressed throughout the planning process about water rights, protection of wildlife, protection of Native American sites and archæological features, and compliance with the California Environmental Quality Act. The mere act of creation of a new public agency will not nullify the protections and requirements of existing laws.

Finally, the creation of the San Joaquin River Conservancy by state statute, with or without its own authority to generate revenue from fees and taxes, would not and cannot have any effect on existing constitutional and statutory protections requiring a vote of the people to impose taxes. The conservancy would be required to obtain funding from taxes in accordance with and subject to those existing protections. Financing the parkway is discussed in Chapter 10.

¹⁰ Mitigation land banks have been an effective means of transferring land acquisition and management costs to a public or private entity with an obligation to mitigate a project. A typical transaction could involve the entity that is building the project to purchase land determined by regulatory agencies to be appropriate for mitigating some or all of the project's environmental impacts and to endow at least part of the cost of maintaining and protecting the land's natural resources that provide mitigation for the impacts. It is not necessary that the mitigation lands be close to the project site, but there has to be similarity between resources affected by the project's impacts and the resources in the mitigation bank. An important responsibility of the Conservancy and its member agencies would be to monitor for mitigation opportunities.

Chapter 9
Land Acquisition



LAND ACQUISITION PRIORITIES

There will be two significant constraints on the acquisition of land and water areas for the parkway: the time required to accomplish transactions and the availability of funding. Given these constraints and experiences elsewhere, it is not unreasonable to expect that completion of land acquisition may take as long as two decades.

The following land acquisition priorities are based on the fundamental goals expressed for the parkway. They provide a guide for making choices among parcels that are candidates for acquisition. They should not be applied rigidly; for example, an opportunity to acquire land on favorable terms should not be passed up simply because the land in question is of lower priority than other active parkway land acquisition projects.

- 1. Land necessary for the wildlife corridor at least 200 feet in width on both sides of the river, terrain and other physical constraints permitting.
- 2. Habitat land adjoining the wildlife corridor or DFG's existing ecological reserves suitable for a natural reserve, an enlargement of the wildlife corridor, or an addition to existing reserves.
- 3. Land necessary to provide a buffer for the wildlife corridor or a natural reserve, of a width ranging from 100 to 600 feet, depending on the adjacent land use.
- 4. Land necessary to provide a corridor for the multipurpose trail which will for much of its length accommodate bicycling, hiking, and equine riding on parallel, separate paths or paved surfaces to be not closer than 150 feet from the edge of the wildlife corridor, unless terrain or other physical constraints necessitate a narrower buffer. Ideally, the trail corridor should be at least 100 feet wide, but terrain and other factors may result in a narrower trail corridor.
- 5. Land suitable for canoe put-in and take-out and rest areas.
- 6. Disturbed land suitable for restoration through planting with native vegetation sufficient to provide cover, nesting, foraging, etc. where gaps exist in the wildlife corridor.
- 7. Land suitable for:
 - the expansion of Woodward Park and Lost Lake Recreation Area,
 - an interpretive center adjoining the Willow Unit of DFG's ecological reserve,
 - a group campground on Scout Island,
 - a new wayside campground and a small, resilient nature area at the Highway 99 crossing, or
 - feeder trail routes connecting to the main trail corridor.
- 8. Land outside the wildlife corridor along the river or adjoining a natural reserve (and its adjoining buffer) suitable for:
 - creation of wetlands for recreational use or additional fish, waterfowl, or other wildlife habitat through reclamation of mined lands,
 - restoration as upland habitat,
 - a branch wildlife corridor connecting the river and Little Table Mountain,
 - an equestrian center, or
 - a golf course.
- 9. Land anywhere within the riverbottom and adjoining the parkway that provides additional wetland or upland habitat, accommodates the expansion of an existing park or recreation area to meet elevated usage levels or to disperse human activity more widely, or provides a new site for an activity to relieve or reduce human impacts on a more sensitive area.

(One such area is identified below Woodward Bluffs. The parkway boundary aids in setting priorities. It should not be regarded as precluding opportunities to purchase from landowners who wish to sell land outside the boundary designated in this plan. With the passage of time and changing circumstances, it is likely that some lands outside the boundary will, upon reconsideration, have become appropriate candidates for acquisition for the parkway.)

TYPES of LAND TRANSACTIONS

This plan emphasizes the importance of approaching land transactions with complete flexibility so that parkway goals can be realized on mutually acceptable terms that are closely adapted to the landowner's needs in retaining or disposing of the land.

Land acquisition for parks, recreation areas, and natural reserves is often thought of only in terms of an outright purchase of land, with a governmental agency becoming the owner. This is not always the case, however. There are a number of different land transactions, involving the creation of other legal interests in land as alternatives to an outright purchase, that provide for the most effective use of limited public funds while also enabling the landowner to meet his/her objectives – including remaining in possession of the land – and to protect or enhance property value in ways compatible with the parkway.

During the course of this planning process, personal communications with landowners in the area of the proposed parkway and affected public agencies revealed that a wide variety of possible transactions, and combinations of transactions, have already been given some consideration.

The variety of potential transactions is one of the principal reasons for recommending establishment of a locally based, state-level conservancy and to recommend a governing board consisting of public agencies that own land or otherwise have an interest in the parkway's recreational opportunities or the conservation of its natural resources. The conservancy will provide the coordinating function that is essential to assuring that the full range of alternative transactions and possible relationships with member agencies are considered and the best are selected so that the goals of both the landowner and the parkway are met.

Some of the more common types of possible land transactions are described below. This list is not comprehensive, however, as the future interaction between landowners and the conservancy and its member agencies will undoubtedly result in transactions whose specific terms cannot be predicted in this plan. While some of these sample transactions have been based on discussions with landowners in the proposed parkway, the mention of any particular transaction in this parkway plan is for illustrative purposes only and does not, of course, reflect an actual proposal.

FULL FEE PURCHASE

In this transaction, the landowner sells for money all of his/her interests in the particular parcel being acquired. In the case of an acquisition by a state agency, state law requires that an offer to purchase be based on fair market value. This plan assumes that the San Joaquin River Conservancy or one of its member agencies (e.g., DPR or DFG) will take title in most instances. It is possible, however, that due to a temporary lack of funds, no public agency would be able to make a timely purchase; in this instance, a cooperating nonprofit land conservation organization (e.g., The Nature Conservancy, Trust for Public Land, or San Joaquin River Parkway and Conservation Trust) could make the purchase on an interim basis, with the intention of selling the land to the appropriate public agency later, when sufficient funding becomes available.

OPTIONS

As a way to maintain the availability of a particular parcel that is desirable for future acquisition for the parkway, a landowner who has no immediate plans to develop or sell the parcel to another private party could grant an option or right of first refusal to the conservancy or a member agency. Consideration paid for an option under these circumstances is typically nominal.

LIFE ESTATES

A landowner who has no heirs apparent likely to want to occupy the land might consider selling a remainder interest (at a price less than the full fee value) to the conservancy or a member agency and retain a life estate. This transaction would create a cash-flow to the landowner and enable the landowner to realize his/her desire to remain on the land as before while reserving it for future incorporation into the parkway at the end of the life estate. This transaction could have favorable tax consequences, depending on the particular circumstances of the landowner. The life estate would typically include use restrictions (e.g., perpetuation of existing agricultural operations), such that the land would be managed so as to remain suitable for future parkway purposes.

CONSERVATION EASEMENTS

In areas of the parkway where public use is expected to be minimal, conservation easements will probably be relied on more than any other type of transaction. Typically, the landowner agrees to conduct activities, as specified in the easement, that are compatible with the parkway, such as leaving native vegetation intact in and near the wildlife corridor. The conservation easement is typically granted to and held by a public agency that has jurisdiction or expertise applicable to the subject property (i.e., DFG, if wildlife is involved), but it does not confer a right on the agency to occupy the subject property or assert any possessory interest.

The landowner retains all other property rights over the portion of his/her land subject to the easement. The conservation easement will work especially well for parcels in the parkway designated as part of the wildlife corridor along the river or as part of a wildlife reserve. Often, these areas closest to the river are subject to flooding, have open water or wetlands, have highly prized stands of native vegetation, or may be subject to public trust claims by the State Lands Commission. These factors, alone or in combination, may make it attractive to the landowner to create an agreement that defines his/her objectives as a landowner (e.g., perpetuation of an orchard, construction of a new residence) and also defines the natural resource protection or other parkway objectives to be achieved so that the two can be coordinated.

The amount of consideration to be paid for a conservation easement will vary widely with particular circumstances. Consideration need not consist solely of money; instead, the landowner might be motivated if the easement can reduce tax liability, accomplish the settlement of a State Lands Commission claim on terms more adapted to the landowner's needs, or reduce land management and protection responsibility over part of an ownership by transferring that responsibility to the conservancy or a member agency.

¹¹ In this connection, the State Lands Commission provided the following statement: [¶] "The staff of the State Lands Commission is conducting an ongoing study, together with a field survey, to identify and map the extent and location of State owned Public Trust lands in the bed of the [San Joaquin] river. The study will also identify and map the extent and location of privately owned lands which are subject to the 'Public Trust Easement'. The Public Trust Easement is a property interest, based on ancient Roman and British law, held in trust by the State for the benefit of the public. Where the Easement exists, it serves both as a guideline and as a constraint on land use. For example, fishing, hunting, hiking, boating and open space are all proper uses of Public Trust Easement lands as contemplated by the courts. Land uses within areas subject to the Easement may not be inconsistent with public trust needs, as those needs evolve and change over time. [¶]The mapping component of the State Lands Commission study is expected to be complete by the end of February 1992. The Commission and its staff will make the results of their study and mapping available to the Task Force, to adjacent property owners, to local agencies and to the public, and will work toward negotiated agreements to settle land title and boundary questions with adjacent landowners."

EASEMENTS for RECREATIONAL FACILITIES

These easements can be used to set aside areas where some public recreational use is appropriate; they work best in areas where use is intermittent or slight. If more intensive recreational uses are planned for an area, such as camping, picnicking, lake fishing, swimming, or educational or interpretive programs, it is usually more appropriate that full fee title be purchased. Indeed, because of the relatively higher level of public use in these instances, it is unlikely that the landowner would want to continue to retain an interest in the affected land.

Thus, an easement would typically be used to acquire a riverfront site for a canoe rest area or a corridor for a trail or bikeway to construct facilities there in accordance with the terms of the easement. Granting or selling an easement may offer advantages over a sale of fee title in certain circumstances, such as avoiding severance of a large parcel just to provide a temporary trail alignment that will be relocated later. Since the trail corridor will also provide access for patrol vehicles, the landowner can benefit from a higher level of surveillance by parkway personnel.

DONATIONS

The donation of land, or the partial value of the parcel being acquired, may, depending on the circumstances of the particular landowner, be advantageous in reducing income, estate, capital gains, or property tax liability. There are a variety of ways to accomplish a donation; for example, donating a remainder interest and retaining a life estate will give the landowner continued occupancy and the opportunity to avoid estate taxes and capital gains taxes on what is perhaps a fully appreciated asset and to reduce income tax liability.

LAND EXCHANGES

There could be instances in which a parcel in the proposed parkway may have portions that are not suitable for particular parkway uses, but the owner wishes to sell it intact. If such a parcel is acquired by the conservancy or a member agency, there may be opportunities to exchange any developable portion that is surplus to parkway purposes for other, nearby lands in the proposed parkway that are needed for parkway purposes. Also, a member agency may have land elsewhere in the state that it determines to be surplus and decides to use in an exchange involving land in the parkway.

MITIGATION LAND BANKS

Growth pressures in California are creating a corresponding and expanding need to find and protect habitat lands to mitigate for urban development and public works projects. These pressures have stimulated creative approaches to meeting the obligations of the project proponents to mitigate their projects' impacts under state and federal law.

The trend is toward setting aside substantial tracts of habitat lands that would serve the mitigation needs of one very large project or several smaller ones and would preserve an entire natural community or a distinct ecosystem involving many wildlife species. The trend is away from protecting a single affected species or from just acquiring the minimal acreage of the land nearest to the project that can still function as habitat. The latter approach has resulted in fragmented land acquisitions with diminishing ecological values.

The rarity and high quality of habitat types in the San Joaquin riverbottom, relative to what is available elsewhere in the San Joaquin Valley, would make it an attractive candidate for becoming a fairly large-scale mitigation bank. For example, the proposed Los Banos Grandes Reservoir under consideration as an addition to the State Water Project will have an adverse impact on several hundred acres of native sycamore groves and will also adversely affect Los

Banos Creek and other wetland and riparian resources. This reservoir site and the San Joaquin River would appear to be sufficiently similar that many of these impacts could be mitigated through the acquisition and protection of considerable acreage in the riverbottom.

Land transactions to create the mitigation bank would probably consist entirely of full fee title purchases, using State Water Project funding, thereby relieving pressure on other funding sources relied on for the parkway. There is also normally an obligation to finance the future management of the habitat lands in the mitigation bank, which is best accomplished through an endowment created by the project proponent, using its funds. The infusion of the substantial land acquisition funds needed to create a major mitigation land bank would, of course, assist the more rapid realization of parkway objectives.

RESOURCE MANAGEMENT AGREEMENTS

In some instances management agreements have proven useful to landowners who have consciously pursued good land stewardship but need technical assistance in, for example, assuring proper protection for a newly active nesting site, reducing eutrophication of a lake, etc. In exchange for the technical assistance or other services the public agency can provide or arrange for, the landowner might agree to continue his/her land stewardship program indefinitely.

Management agreements are fully voluntary, but usually provide for pre-termination notice so that the conservancy or a member agency can devise a new strategy, such as an outright purchase, to perpetuate protection of the affected resources. These agreements can be drafted to be enforceable against a subsequent purchaser, in order to continue protection of the natural resource beyond the tenure of the current owner.

PROTECTION of EXISTING ENTITLEMENTS

Meeting parkway objectives should necessarily also involve the local land use regulatory agency—the city or county having jurisdiction over the particular parcel—so that local land use policies and ordinances can enable the landowner to coordinate his/her objectives so they are compatible with or supportive of parkway objectives. In particular, local ordinances and policies should be reviewed to assure that the landowner, by assisting the realization of parkway objectives by clustering residential development away from the wildlife corridor or creating a parkway amenity (such as a lake), does not experience a reduction in his/her existing entitlements.

The following example will illustrate how the local land use regulatory agency has a key role in supporting the efforts of the landowner to develop land in a way that benefits the parkway and protects or enhances the landowner's entitlements. Again, though based on circumstances frequently encountered along the San Joaquin River, this example is hypothetical and does not reflect a specific proposal.

Assume the owner of 200 acres entirely in the riverbottom and currently used for cattle grazing has been unable to find a buyer interested in continuing agricultural uses and has decided to develop the 10 residences that are authorized by the existing 20-acre minimum zoning. There is a sand and gravel deposit that can be mined economically. The mining would result in about a 25-acre lake that will complement the parkway, and the haul route and bridge connecting the deposit to the processing site could be aligned so as to be suitable later for a segment of the parkway trail/bikeway. Under existing zoning and land use policies the lake would, however, reduce the existing development entitlement to eight residences.

If the local jurisdiction provides itself the authority to override the effect of the reduction in gross acreage to accommodate both landowner and parkway objectives in this development, the jurisdiction could offer the landowner the full, 10-unit entitlement on conditions such as the following:

- 1. After completion of sand and gravel extraction, the lake is created in accordance with a reclamation plan that meets basic state and local legal requirements and also includes requirements that will make it usable for the particular post-mining parkway use that has been planned (visual enhancement, waterfowl habitat, etc.).
- 2. Rather than develop eight remaining 20-acre parcels with a residence on each, the landowner would be entitled to develop all 10 residences allowed under existing zoning for the full 200 acres if (a) they are clustered in an area that is upland of the lake and does not involve sensitive natural or cultural resources and (b) the landowner dedicates an easement over an area along the river to accommodate the wildlife corridor that is at least equal to the 25 acres now covered by the lake. (If advantageous to the landowner, the lake could also be dedicated for parkway purposes while reserving access by future occupants of the 10 residences.)

At this point, instead of pursuing a scattered, 10-unit development over 200 acres that does not provide any benefit to the parkway, the landowner has:

- 1. Received royalty income from the sand and gravel.
- 2. Preserved the entitlement to develop the full number of residential units for the original 200 acres, realizing the return from the additional two residential units that would otherwise have been lost under current policies.
- 3. Reduced infrastructure costs through clustering.
- 4. Created additional value through the lake and the protected riparian area, which can be enjoyed as a scenic foreground and close-by recreational opportunity by the future occupants of the 10 residences. (The lake could also serve to buffer the residences from the multipurpose trail or the wildlife corridor along the river.)
- 5. Reduced tax liability through the donation of interests in some of the land.
- 6. Used 50 acres for the lake and the area dedicated through an easement for wildlife protection, and developed the 10 residences on, say, 25 acres, which leaves 125 acres. The remaining 125 acres would still have significant income potential through either being retained in agriculture or developed as a golf course or equestrian center, or all or part could be sold or made subject to an easement for expansion of the parkway. Entering into a contract pursuant to the Williamson Act for the remaining 125 acres could confer additional tax advantages. All of these latter uses would be consistent with the parkway and would possibly also contribute to a particular amenity value desired for the residential development.

Chapter 10
Parkway Finances and Fiscal Impacts



PARKWAY COST COMPONENTS

This chapter describes the cost components involved in bringing the parkway into being and identifies some of the principal ways and means of financing those costs.

The major cost components are:

- Land Acquisition, which includes any transaction affecting land, such as a purchase, a land exchange, or granting an easement. (The different types of transactions are discussed in Chapter 9.)
- Parkway Facilities Development, which includes, for example, trail construction, replacement of deteriorated structures, campgrounds, safety-sanitation-security improvements, parking, canoe put-in/take-out, and interpretive centers.
- Ongoing Operating and Maintenance Costs, which include, for example, law enforcement, equipment maintenance, litter removal, biological monitoring, mowing turf areas, and minor repairs to trails.

These costs will no doubt represent a major financial commitment by the Fresno-Madera community. The weak economy and fiscal difficulties of state and local government make this commitment appear to be an even greater challenge at this time, but the parkway plan will take at least two decades to be carried out, during which it is probable that the economy will undergo several significant changes. The pace at which the parkway is brought to realization will adapt to those changing circumstances.

The focus of the analysis of financial resources presented in this chapter is toward reducing the local burden of these costs through principally the following means:

- Obtaining matching funds from the state.
- Forming partnerships with landowners to preserve property values while meeting parkway goals.
- Shifting significant land acquisition and management costs to other entities that discharge their obligation to mitigate the environmental impacts of their projects in the San Joaquin Valley through participation in a mitigation land bank in the parkway.

In addition to securing support for the planning concepts for the parkway, demonstrating broad community support for a comprehensive financing strategy is essential to obtaining the funding from state and other outside sources that will help to make the parkway a reality.

POTENTIAL FUNDING SOURCES

The parkway's operational and capital outlay needs cannot be met in a few years or through a single source of funding. These needs will have to be financed through a combination of a variety of sources that are utilized over several decades.

Because the outcome of a future election, the decision of a state or federal agency to award a local assistance grant, and the particular action of a city council or board of supervisors cannot be predicted, it is impossible evaluate the feasibility or likelihood of commitments of funding from any particular source mentioned in the following list. These uncertainties also make it impossible to determine with precision the amount of funding needed for the parkway because the timing of

the availability of the potential funding is unknown. Without being able to know the timing of funding availability, estimates that purport to reflect inflation become highly speculative.

The purpose of the list is to demonstrate the remarkably wide range of choice and to stimulate other creative solutions. Because this plan is expected to be implemented over several decades, a funding source that today is unrealistic may become attractive later on.

Moreover, during this long project implementation period for the parkway, wholly new funding sources may emerge. For example, in recent months the Legislature has been considering a tax on domestic water consumption to create a fund to protect water quality and to restore and manage streams, rivers, wetlands, riparian areas, and other aquatic habitat. This potential revenue source is important because it could provide significant funding for operations and maintenance, which cannot be provided through general obligation bonds. In addition, there is interest in examining the feasibility of taxing transfers of real estate to create a fund to provide for the acquisition of parks, open space areas, and wildlife habitat. No legislation to accomplish this has, however, been introduced.

Capital outlay (land acquisition and parkway facilities development) only:

- State or local general obligation bond issues
- Mitigation land banks
- Development impact or "linkage" fees
- State and federal highway construction mitigation funds (e.g., AB 471)
- Federal grant funds (Land and Water Conservation Fund)
- Trail construction funding from the U.S. Forest Service
- State funds expended to acquire or develop new state land in the parkway for recreation areas or natural reserves.

Operations and maintenance (or capital outlay):

- Benefit assessments
- · Parkway user fees
- Business license and other local fees
- Local sales tax increase
- Transient occupancy tax ("hotel-motel tax")
- Rental income from concessionaires and special events
- Local revenue bonds
- Revenue and royalties from sand and gravel extraction
- State funds expended to manage and operate state parkland, DFG's ecological reserves, etc. in the parkway
- State grants from the Environmental License Plate Fund for land acquisition, interpretive facilities, educational programs, etc.
- State grants pursuant to Urban Stream Restoration Program
- State grants under the new California Riparian Habitat Conservation Program¹³
- Grants from the California Department of Boating and Waterways for non-motorized boating facilities
- Settlements with the U.S. Bureau of Reclamation in connection with the reauthorization of Friant Dam
- Waterfowl habitat improvement funds from the U.S. Fish and Wildlife Service
- Income from management endowments created for mitigation land banks
- Private donations from individuals, corporations, and foundations
- Cooperative expenditures by land conservation organizations

¹² Senate Bill No. 959 (Presley) of the 1991-92 Regular Session.

¹³ Chapter 762, Statutes of 1991. This legislation was enacted last year. It authorizes the state Wildlife Conservation Board to spend funds and make grants for the acquisition, preservation, restoration, and enhancement of riparian habitat and to engage in other land transactions having those objectives. No funding was appropriated in that legislation, however.

 Cooperative expenditures by the University of California Natural Reserve System (if the new San Joaquin Valley campus selection is close to the river)

Redirected funding for a state agricultural museum (if the CSU Fresno site is no longer feasible).

In the succeeding sections, the major parkway cost elements are discussed in relation to possible funding sources. However, the particular mix of funding is provided only as an illustration of what is realistically possible for the Fresno-Madera community and state government. Decisions about how to fund particular parkway projects and programs will be made in the future by a combination of the voters of the region, the governing board of the conservancy (or other managing entity), state government, and other public agencies and private entities with interest in or jurisdiction over some aspect of the parkway. Which projects and programs receive funding will depend to a great extent on the amount of funds available at any given moment. The greater likelihood is that land acquisition and the development of parkway facilities will have to occur in several phases over several decades, as funds become available.

LAND ACQUISITION COSTS

Based on admittedly sparse data—here appear to be only two recent MAI appraisals in the riverbottom—total land acquisition costs in the parkway "zone of interest" are estimated to be in the range of \$40 to \$50 million. This total would provide funding for the fee title purchase of about 2,900 acres for recreation areas, trial corridors, and natural reserves in the parkway between the North Fork Road crossing in Friant and the Highway 99 crossing. Of this total acreage, approximately 1,950 acres are located in Fresno County and approximately 950 acres in Madera County.

No land acquisition downstream of the Highway 99 crossing is proposed, but should funding be available, opportunities to acquire easements from willing landowners to protect riparian vegetation and the wildlife corridor along that reach of the river should be acted on.

This estimate of land acquisition costs anticipates funding needs for other land transactions that do not involve purchase of full fee title, such as easements for trails and canoe facilities. Purchasing easements can result in some savings in acquisition costs.

It should be restated that the policy reflected in this plan is that land acquisitions should be made from willing sellers only. If a willing sale has seemed unlikely, the plan has been adapted to that reality. These adaptations have been few in number and did not diminish the overall parkway concept.

The following sources should be given primary consideration for funding land acquisition costs:

Existing Local Funds

Pending the availability of other funding sources, a local public agency with existing revenue bonding authority (possibly the Fresno Metropolitan Flood Control District, which has statutory authority to acquire and develop land for recreational purposes) could assist on an interim basis by providing funds to acquire land in the riverbottom (or obtain options to purchase those lands). Total land acquisitions in this initial phase would be in the range of \$20 to \$25 million.

State WCB Funds

The state Wildlife Conservation Board, using funds currently available to it and likely to be obtained in the next three fiscal years, can probably furnish a total of \$5.0 million toward land acquisition. Despite the recurring deficit in state finances, the Administration appears likely to utilize special funds and make riparian corridors a spending priority, given the expected recreational demand from the population growth occurring in inland valleys and the enhanced public awareness of and appreciation for California's rivers. Also, any statewide bond issue for

parks and wildlife is likely to feature some funding for riparian corridors that would be available to the WCB.

New Statewide Bond Issue

Funding at a level of \$18 million specifically for land acquisition by the San Joaquin River Conservancy should be sought for inclusion in the next statewide general obligation bond issue for parks and wildlife. Although seeking this amount may seem ambitious, it is considerably less than the funding proposed by the Administration for each of the three existing conservancies. Moreover, the political opportunities are exceptionally favorable at this time, as the projected population growth for the San Joaquin Valley can make a strong case for support for the bond issue on the basis of the need for a major recreational and wildlife project in the area.

Mitigation Land Bank

As previously discussed in Chapter 9, growth in California is creating a corresponding demand for high quality habitat areas to acquire, protect, and manage as mitigation for public works projects and other major development having significant environmental impacts. The riverbottom of the San Joaquin River is ideal for this purpose, and the conservancy and its member agencies should maintain active contact with all proposed, large-scale projects in the San Joaquin Valley that are likely to have substantial mitigation requirements. It would be relatively easy to meet \$20 million of the parkway's natural reserve acquisitions through the creation of a mitigation land bank if the right connection with one or more major projects is made.

Mineral "Severance" Tax

The County of Fresno, the County of Madera, and the City of Fresno, could jointly establish and administer, possibly as part of their respective business license taxes¹⁴, an at-the-scale tax calculated on the basis of sand and gravel resources sold or used in the immediate market area, regardless of source and regardless of end-use (e.g., asphalt, concrete, etc.). The immediate market area could be defined as a zone roughly parallel the San Joaquin River whose boundaries average approximately five miles distant from the river.

Depending on whether voter approval would be required, the revenues should be directed to a special sand and gravel resource conservation fund, which would be segregated from other city and county revenues, to be administered by the conservancy solely for the acquisition of reclaimed MRZ-2 designated lands that are suitable for the parkway. If the tax proves infeasible, it may be possible to obtain revenue from fees incidental to development agreements or the processing of environmental documents. Under either approach, consideration should be given to creating a system of credits or offsets for parkway improvements or habitat restoration measures that exceed minimal mined land reclamation requirements.

The modest per-ton increase in the cost of construction materials would be offset by the enormous savings to consumers in the Fresno-Madera metropolitan area resulting from being able to postpone the shift to the lower quality deposits that would have to be hauled from the Kings River. These savings could be as much as \$387,550,000, assuming 115 million tons of aggregates and a cost differential of \$3.37/ton higher for deliveries from the Kings River.

Local Bond Issue

This source could provide possibly as much as \$20 million of the parkway's land acquisition funding. Local general obligation bond issues should be considered, however, only if several conditions are met:

¹⁴ The County of San Benito recently amended its business license ordinance to include mining operations, which are required to pay a basic business license tax of \$99 per year, plus 5¢ per ton of "depleted minerals", which is defined as extracted and processed minerals, but excluding processing that involves the addition of cement, petroleum-based products, or other amendments. County of San Benito, Ordinance No. 601, adopted September 3, 1991, effective July 1, 1992.

- 1. Economic conditions have improved significantly.
- 2. The State Constitution is amended to change the voting requirement from 2/3 to a simple majority. (There are several proposed state constitutional amendments pending in the Legislature to reduce the majority required to pass local g.o. bond issues. If one of these constitutional amendments passes the Legislature, it would then be submitted to voters statewide at an election in 1992.)
- 3. Funding is included for other park, open space, and wildlife protection projects in the region, in addition to parkway land acquisition, and some funding is also provided for parkway facilities development. Total funding proposed probably should not exceed \$50 million for all projects.

Unless these conditions are met, it is difficult to justify the expense of a campaign, nor is it likely that proponents of the measure could raise sufficient funds for a successful campaign.

FACILITIES DEVELOPMENT COSTS

Interpretive facilities, fencing, campgrounds, restrooms, fishing access, canoe launching, lakeshore improvements, the 23-mile multipurpose trail, safety-sanitation-security facilities, and other major recreation improvements throughout the parkway are estimated to cost a total of about \$27.7 million (in current dollars), including all fees and a 10% contingency.

Appendix 1 consists of a "spreadsheet" displaying estimated costs of developing all major parkway facilities. The facilities listed are the maximum recommended for the parkway in this plan. Improvements for the parkway will be a significant undertaking, but the facilities will be financed and constructed over many years, probably at least two decades.

Significant initial progress can be made in improving the parkway—at a manageable cost—through rehabilitation and expansion of facilities at Lost Lake and Skaggs Bridge Regional Parks; development of an interpretive center and public access facilities at the Rank Island-Ledger Island-Ball Ranch-Willow Unit natural reserve; and access facilities for the Milburn Unit. Improvements for Lost Lake Regional Park should initially be confined to the core area of the existing park; some of the improvements proposed for Lost Lake Regional Park could be sited in areas where the potential for additional sand and gravel extraction should be considered before any parkway improvements are constructed.

The cost of these initial improvements is summarized as follows:

Lost Lake Regional Park (200 parking spaces, one restroom, 100 picnic units, turf, new entrance station)	\$ 545,000
Skaggs Bridge Regional Park (175 parking spaces, one restroom, turf, swimming beach, children's play equipment, fencing, utilities)	1,484,000
Interpretive center and picnic area at Willow Unit	590,000
Access and picnic area at Milburn Unit	34,000
30% A&E	795,900
10% contingency TOTAL	265,300 \$3,714,200

The balance of total parkway facilities development costs —\$24.0 million—if spread over 20 years, would amount to average annual expenditures of \$1.2 million (in current dollars), which

would seem to be well within the fiscal capabilities of the Fresno-Madera community. This figure represents an annual cost of less than \$2.00 per resident of the parkway service area.

Again, a mixture of funding sources seems most feasible, illustrated as follows:

New Statewide Bond Issue

Funding at a level of \$7 million specifically for parkway improvements by the San Joaquin River Conservancy should be sought for inclusion in next statewide general obligation bond issue for parks and wildlife. (When combined with land acquisition funding, there would be a total of \$25.0 million for the conservancy in that measure.)

New Development Impact Fees

The City of Fresno and the two counties have the authority to coordinate their actions and to impose the same development impact or "linkage" fees on new residential construction within the special benefit zone, consisting of the riverbottom and a band approximately 2.0 miles wide extending outward from the bluff edge on both sides of the river. The 2.0-mile width is illustrative for planning purposes only and is based on the perception of some participants in the planning process that a zone approximately 2.0 to 3.0 miles wide would encompass residences considered to be within "walking distance" or a short bicycle ride to the parkway. The fee levels suggested are also intended to be illustrative only, and to indicate the potential revenue from this source under only one set of assumptions. The determination to levy such a fee, and in what amount, resides with each local government.

The river and blufftops are rarely parallel to the adjacent street grid. However, to provide examples of the width of the special benefit zone, 2.0 miles is approximately the distance between the blufftop and Bullard Avenue west of Highway 41 and between the blufftop and the intersection of Avenue 9 and Road 35. The width of the zone, and whether to have more than one zone, would also be matters for determination by the local governments.

Based on the affected jurisdictions' applicable general plans and existing zoning, there is the potential for more than 36,000 new dwellings in this zone over the next two decades. These data are very speculative, as major factors (such as the decision where to site a new campus of the University of California) could significantly alter growth projections.

Of this total, approximately 580 new dwellings could, under existing land development policies of the City of Fresno and the two counties, be situated in on the blufftop edge, with scenic views of the parkway. Because of their prime location, these new dwellings could be charged a significant development impact fee—\$2,000 per each new unit—that would reflect the unit's impact on views of parkway users as well as the immediate accessibility to the parkway enjoyed by the occupants of the unit and the view pricing advantage conferred on them.

Dwelling sites back from the bluff edge but still in the special benefit zone, though not all will have views, nonetheless also derive a special level of benefit by having an important part of their neighborhood recreation needs met by the nearby parkway and by being close enough to it for ready access by bicycle or walking. Depending on topography and the viewer's vantage point, these dwellings could have an impact on the views of parkway users. New dwellings in this zone would be subject to a new development impact fee of \$500 each.

The \$500 fee can be justified under the so-called "AB 1600 nexus test", as it equates to the cost of meeting the demand for additional regional parkland acquisition and development created by an average new household of 3.5 persons. Moreover, this fee represents 0.25% of the price of a new, \$200,000 house in the special benefit zone, which conservatively reflects the pricing advantage or amenity value attributable to the house being located close to the parkway.

Using these assumptions and figures, there is the potential of about \$19,000,000 being available to pay for parkway facilities development as the adjacent areas urbanize over the coming years. The derivation of new development impact fee revenue can be illustrated as follows:

Table 10-1
Potential One-time Revenue from New Development Impact Fees
(Development projected to 2010)

Pe	r-unit Fee	Units	Total Fees
Riverbottom or blufftop Madera County ¹⁵ Fresno County ¹⁶	\$2,000	300 280	\$1,160,000
Special benefit zone Madera County Fresno County	\$500	11,460 24,900	\$18,180,000
TOTAL			\$19,340,000

Local Bond Issue

This funding source would be suitable for parkway facilities development, subject to the same conditions listed in connection with using this source for parkway land acquisition. Assigning \$5-10 million in development costs to this source would be reasonable.

Revenue Bonds

Once major income-producing parkway facilities come into operation, such as a golf course, it might be feasible to issue revenue bonds against their income to finance the development of additional parkway facilities. Similarly, part of the revenue from benefit assessments could be made available "up front" through the issuance of revenue bonds. Revenue bonds should only be used, however, if the underlying revenue stream will not be needed to meet future operation and maintenance costs of the parkway for the life of the bonds.

OPERATION and MAINTENANCE COSTS

When fully developed, the parkway facilities and features contemplated by this plan will incur more than \$2.3 million (in current dollars) in annual operating and maintenance costs. Total expenditures in any given year will, of course, be a combination of expenditure levels authorized by the conservancy and its member agencies (principally DFG, DPR, and the local governments). These costs can be approximately allocated among the principal types of parkway operations, as shown in Table 10-2.

¹⁵ Under existing policies of the Board of Supervisors of the County of Madera, all of these new units would be located out of the riverbottom, on the blufftop.

¹⁶ Existing zoning would allow a total of approximately 700 units in the riverbottom and blufftop areas, of which 250 would be in the community of Friant. Existing policies of the Board of Supervisors of the County of Fresno preclude development in the riverbottom, affecting approximately 420 units of the 700.

Table 10-2 Estimated Annual Operating and Maintenance Costs (All facilities in operation)

Developed recreation areas ¹⁷ Campgrounds Skaggs Bridge ¹⁸ Natural reserve at Rank IsLedger IsBall Ranch DFG Willow Unit (interpretive center only) DFG Milburn Unit (public access facilities only) Williams/Phillips House (interpretive) Trails 10 rangers	\$1,100,000 195,000 100,000 50,000 75,000 50,000 200,000 100,000 500,000
TOTAL	\$2,370,000

As discussed in the following sections, user fees, other parkway revenue, and benefit assessments should be given primary consideration for funding annual operation and maintenance costs:

User Fees

The following estimate in Table 10-3 of potential user fee revenue uses current user fee amounts but assumes a situation about 20 years into the future in which all the principal parkway facilities proposed in this plan have become available for public use, all facilities are operating close to capacity, and visitor fees are diligently collected. (Current fee amounts are used so that a correlation with estimates of annual operation and maintenance costs, which are expressed in current dollars can be made.) Total revenues will, of course, be considerably lower than these estimates during the early stages of the parkway, when many facilities will not have yet been built.

Several participants have noted that user fee estimates used in the planning process suggest potential revenues significantly higher than are currently collected at Woodward Park and the regional parks operated by the County of Fresno. The reason that user fee revenue estimates are high is that the assumption has been made in this plan that fees will be collected diligently, at all times that the parkway's recreation facilities and natural reserves are open, either by parkway personnel or automated gates. This approach has been taken partly because many riverbottom landowners have expressed legitimate concerns about indiscriminate conduct occurring near their property and trespass. Controlled access, where a fee is charged for entrance to parkway facilities, has been shown in other park situations to be an effective deterrent to persons with no legitimate recreational pursuit. This approach also reflects current trends to collect more user revenue to offset revenues lost from other sources formerly available to public agencies with park operating responsibilities.

¹⁷ Assumes operations and maintenance on a total of 220 acres of developed parkland at an annual cost of \$5,000 per acre. These costs would be incurred at Lost Lake Regional Park, the Gunner Ranch day-use area, Woodward Park expansion and bluff trail area, Moen Lakes fishing area, Scout Island, and the Highway 99 crossing.

¹⁸ Figure represents an augmented level of operation and maintenance expenditures needed to rehabilitate Skaggs Bridge Regional Park. Existing expenditure levels by Fresno County are not included.

Table 10-3 Potential Annual Revenue from User Fees

(All facilities in operation)

	Charge	Cars	Persons	Revenue
Lost Lake – day use	\$3.00	212,000	530,000	\$636,000
Lost Lake – camping (100 sites)	10.00	16,800	50,000	168,000
Woodward Park expansion	3.00^{19}	80,000	200,000	240,000
Highway 99 park – day use	3.00	232,000	580,000	696,000
Hwy 99 camping (100 sites)	10.00	20,000	60,000	200,000
Natural reserves	2.50^{20}		76,000	45,000
Gunner Ranch – day use	3.00	6,000	15,000	18,000
Moen Lakes fishing area	1.00		80,000	80,000
Skaggs Bridge	3.00	42,500	170,000	127,500
			*	** *** ***

TOTAL \$2,210,500

It is important to note that Table 10-3 merely illustrates, in the aggregate, the potential amount of revenue from user fees. It should not be assumed from this table that total revenue or all new revenue would go to the conservancy or some other, new managing entity established for the parkway. If a state or local public agency or a private entity assumes or carries out direct operation and maintenance responsibilities on land in the parkway, it would most likely retain revenue generated at that site. On the other hand, the conservancy and its member agencies may agree on a method of pooling and reallocating revenue to parkway operations, possibly utilizing user fees revenue from "profitable" sites, such as campgrounds, to underwrite operation and maintenance costs at other sites that generate less revenue.

Public agencies that have ownership responsibilities in the parkway and have the means and obtain authorization for staffing and funding will undoubtedly have to absorb in their own budgets a significant share of the operation and maintenance costs of the parkway.

In addition to user fees, other direct revenue can accrue to the parkway, examples of which, with estimated amounts for each, are as follows:

Cash donations, foundation grants, etc.	\$50,000
Minor concessions (fishing boat rentals, food and beverage, gift shops, etc.)	200,000
Endowment income to maintain/protect mitigation bank lands	250,000

As parkway operations mature further, it may be possible to realize income from additional sources, such as concession payments from a new golf course or equestrian center and the rental of land at Scout Island for an additional 9 holes of golf adjoining the existing two golf courses.

Benefit Assessments

From among the various municipal "improvement acts", the most appropriate source of funds for supplementing part of the parkway's operation and maintenance costs is the Landscaping and Lighting Act of 1972, which provides for benefit assessments that can be tailored to reflect the benefit received at a given parcel or area from the parkway's operations that are thereby financed.

¹⁹ Day-use fees at Woodward Park are currently \$2.00 per vehicle. For the purpose of estimating revenues, it is assumed that as a parkway facility, the same day-use fee – currently \$3.00 – charged at other recreation areas will also be applied at Woodward Park.

²⁰ Day-use fees collected by DFG at ecological reserves (the Willow and Milburn Units) are set by statute and are currently \$2.50 per person. In lieu of payment of the individual day-use fee, admission is also authorized through possession of a valid California hunting, sportsfishing, or trapping license or a membership card in the California Wildlife Campaign (annual \$12 fee). Organized youth and school groups are entitled to free admission. This table assumes that only one quarter of the visitors pay the \$2.50 fee.

Typically, assessments are collected on each parcel or dwelling unit in the parkway service area, except for any parcel that is actively farmed or subject to a Williamson Act contract and any parcel that is already dedicated to open space.

Many different benefit zone configurations can be developed, but Table 10-4 illustrates a simple approach with graduated (\$100, \$10, and \$3) annual benefit assessments within three zones; the riverbottom/blufftop area, the same 2.0-mile wide special benefit zone used for the new development impact fees, and the remainder of the parkway service area. The table shows revenue using 1990 estimates of the number of existing dwelling units and projecting the number of additional dwelling units in 2010. At full build out the revenue could eventually meet a significant share of annual operating and maintenance costs for the parkway. Again, the determination to impose a benefit assessment and the delineation of the zones and rates would be made by the local governments seeking approval for the assessment.²¹

Table 10-4 Potential Annual Revenue from Benefit Assessments

	Fee/Year/Unit	Units	Revenue
Existing dwellings, blufftop/riverbottom Madera County Fresno County	\$100	20 260	\$2,000 \$26,000
Future dwellings, blufftop/riverbottom Madera County ²² Fresno County ²³	\$100	300 280	\$30,000 \$28,000
Existing dwellings, special benefit zone Madera County Fresno County	\$10	200 26,200	\$20,000 \$262,000
Future dwellings, special benefit zone Madera County Fresno County	\$10	11,460 24,900	\$114,600 \$249,000
Existing dwellings, remainder of parkway service area Madera County Fresno County	\$3	2,600 168,000	\$7,800 \$504,000
Future dwellings, remainder of parkway service area Madera County Fresno County	\$3	5,000 263,000	\$15,000 \$789,000
TOTAL			\$2,047,400

²¹ In contrast to the amounts shown in Table 10-4, the benefit assessment proposed in mid-1991 for parks and street improvements in the City of Fresno involved per-parcel assessments approaching \$60 annually in most areas to be assessed. The decision to abandon those proceedings appears to have been related to the specifics of that proposal. The much lower assessment proposed here, together with its more focused purpose, should enjoy a greater possibility of public acceptance.

22Under existing policies of the Board of Supervisors of the County of Madera, all of these new units would be located

out of the riverbottom, on the blufftop.

²³Existing zoning would allow a total of approximately 700 units in the riverbottom and blufftop areas, of which 250 would be in the community of Friant. Existing policies of the Board of Supervisors of the County of Fresno preclude development in the riverbottom, affecting approximately 420 units of the 700.

SUMMARY

All of the estimated costs and potential revenue sources from the preceding sections of this chapter are summarized in the following table:

Table 10-5 Summary of Estimated Costs and Potential Revenue Sources (current dollars in millions)

Land Acquisition	•	\$40 - \$50
Potential Funding Sources:		
Metro. Flood Control Dist. Wildlife Conservation Board Statewide park bond issue Mitigation bank Mineral severance tax Local park bond issue	\$20 - \$25 \$5 \$18 \$20 \$5 \$20	
Development of All Parkway Facilities		\$27.7
Initial Phase of Development of Parkway Facilities at Lost Lake, Skaggs Bridge, Willow Unit, and Milburn Unit		\$3.7
Potential Funding Sources:		
Statewide park bond issue New development impact fees Local park bond issue	\$7 \$19 \$10	
Annual Operation and Maintenance for All Facilities		\$2.4
Potential Funding Sources:		
User Fees (facilities in use at capacity) Benefit Assessments Cash donations, foundation grants, etc. Minor concessions Mitigation bank operating endowment	\$2.2 \$2.0 \$0.050 \$0.200 \$0.250	

OTHER FISCAL IMPACTS

Although sales and property taxes are not considered in this plan as potential sources of revenue to support parkway operations, the impact of the parkway on each should be noted.

Because the parkway will create many new recreational opportunities, users of the parkway will make purchases of recreational equipment and accessories (bicycles, jogging shoes, fishing tackle, camping equipment, specialized clothing, etc.) and make other expenditures (such as purchasing gasoline, restaurant meals, etc.) related to their use of the parkway. Most of these purchases will result in additional sales tax revenue to the affected jurisdictions.

The public acquisition of land for the parkway will initially result in a decrease in property taxes. However, most lands recommended for acquisition have relatively low assessed values as agriculture, sand and gravel mining, etc. and, if developed, could in many instances result in

unusually high infrastructure costs due to relatively greater distances from municipal service connections. On the other hand, blufftop and other nearby lands would, when developed, enjoy the pricing advantage or amenity value attributable to being located close to the parkway, which would be reflected in higher assessed values than if the same dwellings were located several miles from the parkway. These higher assessed values and the avoidance of higher infrastructure costs by not developing in the riverbottom have the potential to offset the lost property tax revenue.

Chapter 11 Implementing Actions



PRINCIPAL IMPLEMENTING ACTIONS

Many decisions and actions will be required to carry out this parkway plan. The following list consists of the more salient steps occurring relatively early in the process of implementing this plan. The list is not sequential; some of these steps will overlap or occur simultaneously. Because of the uncertainties inherent in a long-term project, it is unrealistic to attempt a comprehensive list of all phases for land acquisition and parkway facility development. The timing and sequence of these activities will primarily reflect available funding, the particular landowners who chose to sell, and community priorities, all of which will shift over time.

- 1. The Task Force adopts this parkway plan and recommends it to the County of Fresno, City of Fresno, and County of Madera for inclusion in their respective general plans in accordance with procedures those jurisdictions select.
- 2. State legislation to create the San Joaquin River Conservancy is formulated and enacted during 1992.
- 3. Parkway proponents and local officials work jointly in 1992 to support state funds for the parkway from existing sources, a proposed new statewide general obligation bond issue for parks and wildlife, and appropriate new sources, should any be proposed.
- 4. Using the section in Chapter 2 on "Goals, Objectives, and Policies for the Parkway", planning department staff of the three jurisdictions collaborate on developing common goals, objectives, and policies that will enable the parkway plan to be incorporated into their local governments' respective general plans and collaborate in the joint preparation of a single draft EIR for the parkway plan. Funding for the EIR needs to be obtained on a shared-cost basis; continued, partial reliance on state sources seems most likely at this time.
- 5. The County of Fresno, City of Fresno, and County of Madera hold joint hearings, adopt a common set of goals, objectives, and policies for inclusion in their respective general plans, adopt implementing actions for outdoor lighting, runoff control, etc., and certify the single EIR for the parkway plan.
- 6. Capital outlay funding for the conservancy is provided through a voter-approved, statewide general obligation bond issue for parks and wildlife at the November 1992 election or at a later election.
- 7. The County of Fresno, City of Fresno, and County of Madera jointly agree on a local financing package for the parkway, which could have some of the following elements:
 - a. Submitting for the approval of the voters within the parkway service area a measure providing for broadly based local matching funds, which would most probably be a very low benefit assessment (less than \$5 per parcel annually) for most residents of the service area, plus possibly a local general obligation bond issue.
 - b. Adopting the same schedule of development impact fees for new development in the riverbottom and in the special benefit zone near the parkway.
 - c. Adopting the same fee or tax on sand and gravel extractions.
- 8. When funded, the conservancy commences operations, employs and trains rangers and other personnel, contracts for services from member agencies, begins land acquisitions, plans parkway facilities, and adopts its own regulations for parkway lands governing human conduct and protection of parkway resources and private property rights.
- 9. When funded, the conservancy commences priority parkway facility improvements at Lost Lake Regional Park, Skaggs Bridge Regional Park, the Willow Unit, and the Milburn Unit.



DESCRIPTION	QTY UNIT	UNIT PRICE	SUBTOTAL	TOTAL
TRAILS				
Multi-use trails, 12' W, DG paved	23 mi	100,000.00	2,300,000	2,300,000
CANOE REST FACILITIES - 3 LOCATIONS				
Picnic Table w/slab and trash can	9 ea	1,000.00	9,000	
Vault toilets-1000 gal. w/cap	3 ea	10,000.00	30,000	39,000
value tonota 1000 gan. w/oap	J 02	10,000.00	50,000	37,000
TRAIL CROSSINGS				
Single span arch, single lane, steel-12' W, 60' L	11 ea	60,000.00	660,000	660,000
LOST LAKE REGIONAL PARK				
New A/C parking	350 ea	1,200.00	420,000	
Replacement A/C parking	100 ea	1,200.00	120,000	
New overflow DG parking	450 ea	800.00	360,000	
400 series comfort station- no showers	2 ea	150,000.00	300,000	
Swimming beach area	2 ac	20,000.00	40,000	
Irrigated turf & landscaping	30 ac	50,000.00	1,500,000	
Entrance station w/sign	1 ea	50,000.00	50,000	
Option: interior road system - 2 lane paved	2 mi	250,000.00	500,000	
Nature trail	0.5 mi	30,000.00	15,000	
Interpretive station	1,000 sf	150.00	150,000	
Bus parking and access	25,000 sf	3.00	75,000	
Picnic units	450 ea	1,000.00	450,000	
Full RV hookup sites	100 ea	10,000.00	1,000,000	
Utilities tie-in & services	1 ls			5 220 000
Offindes tie-in & services	1 13	250,000.00	250,000	5,230,000
WILLOW UNIT NATURAL RESERVE				
Interpretive center	2,000 sf	150.00	300,000	
New A/C parking	50 ea	1,200.00	60,000	
Picnic units	10 ea	1,000.00	10,000	
Utilities tie-in & services	1 ls	200,000.00	200,000	
Vault toilets	2 ea	10,000.00	20,000	590,000
WILLIAMS/PHILLIPS HOUSE				
Restore as Interpretive Center	2,500 sf	400.00	1,000,000	1,000,000
GUNNER RANCH				
New A/C parking	25 ea	1,200.00	30,000	
• •	0.25 mi	*	62,500	
Paved access road		250,000.00	,	
Irrigated turf & landscaping	2 ac	50,000.00	100,000	
Picnic units	15 ea	1,000.00	15,000	
Vault toilets	2 ea	10,000.00	20,000	227,500
AVENUE 10 CANOE LAUNCH FACILITY				
Repave existing road	500 lf	40.00	20,000	
Picnic units	2 ea	1,000.00	2,000	
Vault toilet	1 ea	10,000.00	10,000	32,000
WOODWARD BLUFF				
Overlook area w/picnic units	2 ea	1,500.00	3,000	3,000
Woodwindania				
WOODWARD PARK ADDITION	1	250,000,00	250,000	
Extend paved access from city road into park	1 mi	250,000.00	250,000	
New A/C parking	200 ea	1,200.00	240,000	
New overflow DG parking	120 ea	800.00	96,000	
400 series comfort station - no showers	2 ea	150,000.00	300,000	
Irrigated turf & landscaping	15 ac	50,000.00	750,000	
Pienic units	200 ea	1,000.00	200000	1,836,000

DESCRIPTION	QTY UNIT	UNIT PRICE	SUBTOTAL	TOTAL
MOEN LAKES FISHING AREA	4 # 0		100.000	
New A/C parking	150 ea	1,200.00	180,000	
Vault toilets	4 ea	10,000.00	40,000	
200 series comfort station	1 ea	100,000.00	100,000	
Smooth 3-wire and steel post perimeter fence	3,000 lf	3.00	9,000	
Picnic units	50 ea	1,000.00	50,000	650.000
Utilities	1 ls	300,000.00	300,000	679,000
SCOUT ISLAND				
Single lane gravel access road	1 mi	75,000.00	75,000	
Group camping area	2 ac	45,000.00	90,000	
Swimming beach area	1 ac	20,000.00	20,000	
Vault toilets	2 ea	10,000.00	20,000	205,000
MILBURN UNIT NATURAL RESERVE				
Repave existing road	100 lf	40.00	4,000	
Picnic units	10 ca	1,000.00	10,000	
Vault toilets	2 ea	10,000.00	20,000	34,000
ANALYS PECEDE ATTOM A PEA				
HWY 99 RECREATION AREA New A/C parking	350 ea	1,200.00	420,000	
Overflow DG parking	350 ca	800.00	280,000	
400 series comfort station - no showers	3 ea	150,000.00	450,000	
Full RV hookup sites	100 ea	10,000.00	1,000,000	
Entrance station w/ sign	l ea	50,000.00	50,000	
Extend paved access from county road into park	0.5 mi	250,000.00	125,000	
Children's play equipment	1 ls	50,000.00	50,000	
Nature trail	1 mi	20,000.00	10,000	
Irrigated turf & landscaping	35 ac	50000.00	1,750,000	
Picnic units	350 ea	1,000.00	350,000.00	
Utilities tie-in and services	1 ls	500,000.00	500,000	4,985,000
SKAGGS BRIDGE REGIONAL PARK				
Demo. existing facilities	1 1s	5,000.00	5,000	
New and replacement A/C parking	175 ea	1,200.00	210,000	
400 series comfort station -no showers	l ea	150,000.00	150,000	
Irrigated turf and landscaping	10 ac	50,000.00	500,000	
Swimming beach area	3 ac	20,000.00	60,000	
Children's play equipment	1 ls	50,000.00	50,000	
Smooth 3 wire and steel post perimeter fence	3,000 lf	3.00	9,000	
Treated well water, septic tak sewer, elect serv	1 ls	500,000.00	500,000	1,484,000
, ,		,	,	2, 10 1,000
GENERAL ITEMS				
Steel access gates	12 ea	4,000.00	48,000	48,000
SUBTOTAL CONSTRUCTION				19,352,500
A & E, CONST INSP & ADMIN COST @ 30% OF CONSTRUCT	TON			5,805,750
CONTINGENCY @ 10%				2,515,825
TOTAL COST @ 1Q/92				\$27,674,075

Appendix 2

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Persons Contacted

Dr. Bob Winter, Professor of Biology, Calif. State Univ., Fresno, retired.

Dr. John Stebbins, Professor of Biology, Calif. State Univ., Fresno.

Jeffery Halstead, Associate Biologist, Kings River Conservation District, Fresno.

Ronald Rempel, Biologist, Calif. Dept. of Fish and Game, Fresno.

Rhonda Reed, Natural Heritage Supervisor, Calif. Dept. of Fish and Game, Fresno.

Lee Ashford, Biologist, Calif. Dept. of Fish and Game, Fresno.

Joyce Roderick, Educator, Creator of outdoor education program for the San Joaquin River, Fresno.

Clary Creager, local resident, member of the San Joaquin River Parkway and Conservation Trust, Fresno.

Dave Koehler, Executive Director, San Joaquin River Parkway and Conservation Trust, Fresno.

Sandra Brock, Planner, City of Fresno.

Warren Ball, local resident, Trustee, Ball Family Trust, Fresno.

Representatives of the following organizations:

Sierra Club Audubon Society California Native Plant Society San Joaquin River Committee

Chapter 4.

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Bob Stanfield, Madera Irrigation District 1991 Personal Communication, August 8.

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Coachella Valley Mountains Conservancy

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Dennis T. Machida, Executive Officer, California Tahoe Conservancy, So. Lake Tahoe

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NOTE: The originals of various maps and other documents used in the preparation of the San Joaquin River Parkway Plan have been placed in the custody of the California Department of Parks and Recreation, and may be inspected at departmental headquarters at 1416 Ninth Street, Sacramento, California.



Appendix 3

San Joaquin River Parkway Task Force

Member Entities and Representatives

<u>Entity</u> Representative

Calif. Dept. of Parks and Recreation Donald W. Murphy, Director

Alternates: Ross Henry, David Martinez

Calif. Dept. of Fish and Game Rhonda Reed

Calif. Wildlife Conservation Board John Schmidt, Alternate: Jim Sarro

State Lands Commission Elizabeth Patterson

State Reclamation Board Dee Davis

County of Fresno Supervisor Sharon Levy Alt.: Richard Welton²⁴

County of Madera Supervisor Rick Jensen Alt.: Leonard Garoupa

City of Fresno Mayor Karen Humphrey Alt.: Nick Yovino²⁵

Fresno County and City Chamber of Commerce Lynn Hemink

Fresno Sand and Gravel Producers John Buada

San Joaquin River Property Owners Association Warren Ball

Upper San Joaquin River Association Jim Cobb

San Joaquin River Parkway and Conservation Trust Dave Koehler

San Joaquin River Committee Peggy Smith

Calif. Dept. of Boating and Waterways I.V. Plescov

Assembly Member Jim Costa Bryn Batrich

Calif. Dept. of Water Resources Paula Landis

City of Madera Councilmember Bill Weber Alt.: Ron Manfredi

City of Clovis Councilmember Pat Wynne

Building Industry Association Brent Kesterson Alt.: Jeffrey Harris

Citizens for Community Enrichment Dan Whitehurst
Fresno Metropolitan Flood Control Dist. Doug Harrison

Lower San Joaquin Levee Dist. Reggie Hill

Madera Irrigation Dist. Robert L. Stanfield

Boy Scouts of America Terry Trout
Friant Area Association Dan Pearce

²⁴ The County of Fresno has also been represented from time to time by Carolina Jimenez-Hogg and Kerry McCants.

²⁵ The City of Fresno has also been represented from time to time by Councilmember Tom Bohigian and Al Solis.



San Joaquin River Parkway Plan

ADDENDUM TO APPENDIX 3

San Joaquin River Parkway Taskforce
Resolution
and
Taskforce Member's Comments



As requested by the San Joaquin River Parkway Taskforce, this addendum is added to Appendix 3 of the <u>Final Draft of the San Joaquin River Parkway Plan</u>. The following pages include:

- The San Joaquin River Parkway Taskforce Resolution.
- Vote of the San Joaquin River Parkway Taskforce Members on the above-mentioned resolution.
- Letters of comment submitted by taskforce members at the final taskforce meeting on March 30, 1992. These letters were submitted by:
 - City of Madera
 - Citizens for Community Enrichment
 - Boy Scouts of America Sequoia Council #27
 - Building Industry Association
- Letters of comment submitted by taskforce members received after the final taskforce meeting in response to the final draft plan. These letters were submitted by:
 - San Joaquin River Parkway and Conservation
 Trust
 - Fresno Chamber of Commerce
 - Upper San Joaquin River Association Property Owners Committee
 - Upper San Joaquin River Association
 - Madera Irrigation District
 - Lower San Joaquin Levee District
 - Fresno Metropolitan Flood Control District
 - Fresno Sand and Gravel Producers
 - County of Fresno
 - City of Fresno
 - City of Clovis

SAN JOAQUIN RIVER PARKWAY TASK FORCE RESOLUTION

WHEREAS, the State Department of Parks and Recreation convened the San Joaquin River Parkway Task Force in compliance with Assembly Bill 3121 (statutes of 1990); and

WHEREAS, the San Joaquin River Parkway Task Force is representative of a broad spectrum of interests in the San Joaquin River; and

WHEREAS, this Task Force has participated in the planning process for the San Joaquin River Parkway; and

WHEREAS, this Task Force has reviewed the final draft of the San Joaquin River Parkway Plan prepared by Dangermond & Associates, as per their contract with the State Department of Parks and Recreation and under the direction of the Task Force;

NOW, THEREFORE, BE IT RESOLVED THAT the San Joaquin River Parkway Task Force members, representing their respective organizations;

- 1. Accept the basic parameters of the San Joaquin River Parkway as delineated in the final draft San Joaquin River Parkway Plan;
- 2. Accept the basic concepts, goals and policies of the San Joaquin River Parkway Plan;
- 3. Accept the final San Joaquin River Parkway Plan as a final product in the AB 3121 process;

BE IT FURTHER RESOLVED, that Task Force members will be given until April 30, 1992 to submit written comments to be included as Appendix 3 of a final San Joaquin River Parkway Plan.

So ordered, March 30, 1992

The vote of the San Joaquin River Parkway Task Force members was as follows:

San Joaquin River Parkway Taskforce Vote on Parkway Plan Resolution

Support

CA Department of Parks and Recreation

CA Department of Fish and Game

CA Department of Water Resources

CA Department of Boating and Waterways

Assembly Member Jim Costa

State Lands Commission

State Reclamation Board

County of Madera

County of Fresno

City of Fresno

City of Madera

City of Clovis

Fresno Metropolitan Flood Control District

Madera Irrigation District

Fresno Sand and Gravel Producers

Fresno County and City Chamber of Commerce

San Joaquin River Parkway and Conservation Trust

San Joaquin River Committee

Boy Scouts of America

Oppose

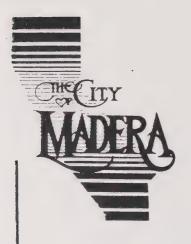
Building Industry Association San Joaquin River Property Owner's Association Upper San Joaquin River Association Lower San Joaquin Levee District

Abstain

Citizens for Community Enrichment

Ex-officio Members

CA Wildlife Conservation Board Friant Area Association



March 26, 1992 FAXed 3/26/92

Jim Costa, Assemblyman
1111 Fulton Street, Suite #914
Fresno, CA 93721

RE: San Joaquin River Parkway Task Force Report

Dear Assemblyman Costa and Members of the Task Force:

The City of Madera had previously scheduled a special workshop on Monday, March 30, 1992. Therefore, neither I nor Ron Manfredi will be able to attend the Task Force meeting. I am forwarding this communication to indicate my support of the San Joaquin Parkway Plan as presented.

I also support the creation of a conservancy to manage the parkway. The proposal for seven local appointees with voting rights (4 Fresno/3 Madera) is acceptable. While State legislation creating the conservancy should not be burdened with requirements for a four-fifths majority from each local jurisdiction, I understand that compromises are sometimes necessary.

My major concern regarding land use issues is as follows. While such issues should remain within the realm of local authorized jurisdictions, the final Task Force Plan should reflect the need to protect sensitive riverbottom lands and prohibit development in such areas.

I appreciate the opportunity for involvement and participation.

Very truly yours,

William R. Weber Mayor

C: Madera City Council Nicholas Pavlovich, City Manager Ron Manfredi, Asst. City Manager

Administration, (209) 661-5400 / FAX (209) 674-2972

205 West 4th Street, Madera, California 93637



March 30, 1992

Assemblyman Jim Costa 1111 Fulton Mall, Ste. 914 Fresno CA 93721

Dear Assemblyman Costa:

On behalf of Citizens for Community Enrichment, I commend you and your staff for the effort and hard work which has gone into the San Joaquin River Parkway Plan. We believe the Parkway will be a tremendous asset to our area and this will be due, in no small part, to your leadership.

We have just installed a new slate of officers. Dr. Harold Haak is our new Chairman and will serve as our liaison for any future task force activities. In the meantime, neither Dr. Haak not our Board of Directors have had sufficient time to give the final draft the consideration it deserves. Therefore, we must abstain from tonight's vote.

I wish you the best of luck in proceeding with this important project.

Sincerely,

Daniel K. Whitehurst Vice Chairman



Sequoia Council #27 • Boy Scouts of America

4539 N. Brawley, Suite 102 • Fresno, California 93722-3991 (209) 275-0811

March 26, 1992

David Martinez
Program Director
San Joaquin River Parkway Plan
Department of Parks & Recreation
P.O. Box 942896
Sacramento, CA. 94296-0001

Dear David:

I'm sorry that I will be unable to personally attend the final Parkway Plan Meeting on March 30, 1992.

However I have reviewed the final draft of the San Joaquin River Parkway Plan and feel that the report should now be accepted in it completed form.

Many thanks for your leadership in completing this project.

Terry F. Trout Council Executive

TFT/hf 2 7 85



March 30, 1992

Mr. Pete Dangermond Dangermond & Associates 1721 Second Street #203 Sacramento, Ca. 95814

Re: BIA Comments - San Joquin River Parkway Final Draft

Dear Mr. Dangermond:

The BIA remains committed to the construction of a regional parkway, which will benefit all valley residents and provide a significant state-wide asset. Much progress has been made in the last fifteen months. Many diverse interests have been brought to relative consensus on most of the issues related to the development of the parkway, and we commend all participants for their efforts to get us this far. However, we do not feel that the job is complete.

Since the release of the first draft of the report the BIA has questioned the validity of both the cost estimates and the revenue projections and the fairness of forcing the new homebuyer to bear such a large percentage of the costs of a project that is supposed to be a regional and statewide asset. We are no more comfortable with the financial element of the latest draft than we were with the first. A few examples of what makes us concerned follow:

- Bridges are still listed (and costed) as 60 foot spans, despite specific direction by task force members that a 60 foot span would not be adequate to meet State and Federal requirements.
- a detailed hydrological study is recommended in the plan, but no funding is included in the cost estimates.
- Projected revenue from user fees is based on an average daily attendance of 5,000 users every day of the year. That's one person for every 23 lineal feet of park on an average day. That seems a little optimistic.



BIA is further concerned that when the revenue estimates were reduced, due to pressure from task force members, the cost estimates also mysteriously decreased by a similar amount. Yet no justification was provided for the apparent arbitrary lowering of the cost estimates. It therefore appears that operation and maintenance costs are not based upon documented and researched analysis, but are instead based upon pure arbitrary conjecture.

Also of great concern to the building industry is the fact that such a large share of the parkway acquisition and development costs are proposed to be borne by the new homebuyer. BIA estimates that approximately 65% of parkway costs would be borne by the new homebuyer. Such a reliance on new residents to pay for a regional parkway, a state-wide asset, is inappropriate and would not withstand a "nexus-test" challenge.

The chapter regarding the conservancy is very vague. However, the conservancy proposal Assemblyman Costas' office mailed to task force members on March 27 appears to have addressed all of the concerns that we had with the conservancy, and we would like to thank Mr. Costa for his leadership on this issue.

The task force has worked long and hard on this plan. Too long and too hard to stop now. If we approve this plan without a realistic funding mechanism, it is bound to collect dust on a shelf somewhere just like the others that have come and gone before. Until reasonably accurate and more fairly distributed estimates of costs and revenues are projected, this plan should not be approved by the task force. Our job simply is not yet complete.

Sincerely,

Brent Kesterson

BIA Parkway Task Force Chairman



San Joaquin River Parkway and Conservation Trust

April 24, 1992

Mr. Ross Henry, Chief
Planning and Local Assistance Division
Department Of Parks and Recreation
P.O. Box 942896
Sacramento, CA 94296-0001

Subject: San Joaquin River Parkway Plan

Dear Mr Henry:

The San Joaquin River Parkway and Conservation Trust supports the general goals and policies of the San Joaquin River Parkway Plan. We are pleased to have been a part of the San Joaquin Parkway Task Force process.

Further, we agree that the public review and Environmental Impact Report process should be initiated by Fresno and Madera Counties and Fresno City. We support the request of state funds for the joint environmental studies due to the significance of the resource and the resulting savings of public funds through a combined effort. The public planning process will further strengthen the plan.

We believe that there are some additional areas of the riverbottom that are floodplain, wetland, mineral resource, or archaeological areas that should be considered for inclusion within the parkway. There should be a mechanism to expand the parkway boundary in these areas.

The Trust supports the concept of creating the San Joaquin River Conservancy. An independent entity

should be formed to oversee the acquisition, development, planning, and operations of most parkway areas. Continuity of administration, design and operations is important to a successful linear open space system.

We look forward to beginning the implementation actions and will help wherever we can. Please feel free to call on us in the future.

Sincerely,

Coke Hallowell, President

Board Of Directors

dave Koehler

Executive Director

cc: Trust Board Of Directors

FOR DELIVERY AT THE SAN JOAQUIN RIVER PARKWAY TASK FORCE MEETING - MARCH 30, 1992

The Fresno Chamber of Commerce is voting in favor of the San Joaquin River Parkway Plan. We feel that this plan deserves to be heard by the appropriate legislative bodies of the City of Fresno as well as the counties of Fresno and Madera.

This plan is not perfect, however. We still believe that the cost estimate of \$80 million may be too low. Additional detail in this area must be worked out in order to present voters and legislators with the most accurate information.

We believe in the Parkway and we believe in its vital position in our valley. For these reasons, although additional review and work are needed, we vote in favor of the Parkway Plan.

Symill Hemile

UPPER SAN JOAQUIN RIVER ASSOCIATION PROPERTY OWNERS COMMITTEE 8805 North Highway 41 Fresno, California 93720 (209) 449-0383 Fax (209) 431-6624

April 23, 1992

Mr. Peter Dangermond
Dangermond & Associates
1721 2nd Street, Suite 203
Sacramento, California 95814

Re: San Joaquin River Parkway Plan/Final Draft

Dear Mr. Dangermond:

Our biggest disappointment in the final draft of the San Joaquin River Parkway Plan is the absence of the land use matrix developed and agreed upon by both the San Joaquin River Parkway and Conservation Trust and the Upper San Joaquin River Property Owners Committee.

In 1990 assemblyman Bill Jones organized a series of meetings between members of the San Joaquin River Parkway and Conservation Trust and members of the San Joaquin River Property Owners Committee in an effort to build consensus between the two groups. After more than 6 months of effort, this matrix was developed and agreed upon by both sides. You and Pat Miller were the consultants used to prepare the matrix. Twice during San Joaquin River Task Force meetings and twice in written comments, I have requested that this matrix be a part of the San Joaquin River Parkway Plan.

It is unfortunate that these requests were ignored. Had the matrix been included in the plan 90 percent of our members' concerns over private property rights would be resolved. However, by ignoring the above mentioned matrix, assemblyman Jones and his staff's efforts to bring consensus to the Parkway controversy was shunned. Also, it heightens suspicions by our members that a plot exists to destroy private property rights, usurp land values, and in an essence, steal private property for public domain. Hopefully, these suspicions are just suspicions and not founded in reality. However, any action or inaction which feeds such suspicions creates an atmosphere which is counterproductive to creating a parkway.

We are pleased with recent additions to the plan regarding flood management and water rights. However, there still needs to be an establishment of a universal

return frequency probability event standard. In other words, Parkway improvements should not be allowed if they block the flow of floods between a 1 and 4 percent return frequency probability.

We believe that the financial analysis is still overly optimistic, especially with respect to entrance fee revenues, balance of operation, and maintenance costs. The other parks in central California, including Yosemite National Park and Millerton Lake State Park, as well as local City and County parks are not self-sufficient. It is illogical to expect the San Joaquin River Parkway to be able to generate enough visitors at a high enough gate fee to be self-sufficient if these other parks cannot. Also, it is not clear if the level of use necessary to generate those revenues would be compatible with the conservation element of the plan.

Another example of over optimistic cost analysis involves the bridges envisioned in the Parkway Plan. The cost estimate is for single-span, 60 foot bridges. Yet the representative of the State Reclamation Board said he would require full span of the 100 year floodway and their estimated width of the floodway is 200 to 600 feet wide. Given that information, the cost estimates for the bridges need to be increased by 300 to 1,200 percent.

We believe the proposed benefit assessment taxes are inequitable. A farmer in the River bottom who is burdened more than benefited by the Parkway should not have to pay \$100.00 for the benefit assessment tax. Urban residents in the Fresno/Clovis metropolitan area benefit greatly from a new array of recreational opportunity but are required to pay only \$2.00 to \$10.00 dollars.

We can understand the reluctancy to put the Parkway Plan to a vote. Nobody wants a 22 mile expansion of Lost Lake Park. The only way to assure that the Parkway is successful is to establish whether or not the Fresno and Madera residents are willing to financially commit to a parkway. Otherwise, the problems associated with lack of maintenance and security patrols at Lost Lake and Scaggs Bridge will be foisted upon the Parkway forever. The only way to assure that such a commitment exists is through the ballot box.

By reference in this letter, I request that the Upper San Joaquin River Property Owners Committee's prior comments to the earlier drafts be included as part these comments. We hope the E.I.R. and land use planing process will resolve these and other concerns we have with the San Joaquin River Parkway Plan.

Very truly yours,

Warren Ball CHAIRMAN

UPPER SAN JOAQUIN RIVER ASSOCIATION PROPERTY OWNERS COMMITTEE

Uhnen Ball 1 ans

Upper San Joaquin River Association Parkway Position Paper

The USJRA has worked diligently with many organizations and individuals over the years to develop policies that may one day turn into an expanded San Joaquin River Parkway. Our Association joined twelve other major community organizations in adopting the "Successful Parkway Ingredients". The USJRA is currently working with land owners, developers and Madera County officials to establish about 1/2 of Madera County's parkway at no cost to existing taxpayers or the State of California. This group of people is demonstrating how cooperation can be used to benefit our community.

The **USJRA** policies concerning the parkway have occasionally been misquoted and misconstrued, for this reason, our positions are stated as follows:

1. Private Property Rights:

Our U.S. and State Constitution clearly protects basic human rights such as our freedom of speech and freedom to own property. Occasionally these basic rights are challenged by special interest groups for a variety of reasons. The USJRA will actively work to protect private property rights. There are a few individuals who want the parkway property owners to pay for much of the parkway by devaluating property values through down zoning or imposing new property use restrictions that makes the land less desirable. These people explain that local regulatory agencies can restrict property uses to such an extent that the value of the land drops substantially. Current zoning on proposed parkway lands is generally AG-20. This zoning allows 1-4 homes per 20 acre parcel (depending on county and individual circumstances). Home sites adjacent to the river are among the most valuable in the community. Some people have suggested that by restricting the right to build adjacent to the river without compensating for property devaluation would be an easy way to get the property owners to pay for much of the parkway. Devaluating property values by a governmental agency for later acquisition is clearly wrong and has been opposed by all organizations who adopted the "Successful Parkway Ingredients."

The AB3121, San Joaquin River Task Force has not suggested restricting property rights without compensation. Buffer zones, building set back requirements, and acquisition of parkway lands must be implemented fairly, with just compensation. Inappropriate use of governmental powers to reduce property values without compensation would definitely cause a backlash against the parkway, accompanied by lawsuits that would most likely derail the parkway movement. Several property owners have stated

that they would immediately divide their property into 20 acre parcels and obtain building permits for river front homes if they sensed that non compensating restrictions were in their future. Other property owners have stated that they are planning on imposing nonrevokable deed restrictions against parkway use on their lands if non compensating restrictions are proposed. It may comfort parkway proponents to know, however, that the property owners unanimously adopted the "Successful Parkway Ingredients." The property owners are very willing to cooperate with the community to obtain a parkway as long as they are treated in a just manner. It is very important that parkway proponents control the process so that everyone is treated fairly.

2. Taxpayer Rights:

Our county and local communities are in tenuous times concerning the rights and concerns of taxpayers. We stand with many other community based organizations who support full public disclosure on taxpayer issues. We also support the right of the public to vote on the new parkway.

We object to "Hidden Taxes" that appear to tax one person, but actually tax someone else. An example of a "Hidden Tax" in the Dangermond report is the tax on gravel. This tax would appear to tax someone other than the general taxpayer. The truth is that a tax on gravel would cause existing road construction and maintenance costs to go up so that tax dollars for those items would have to be increased just to stay even. Some individuals believe it would be easier to raise taxes to build and repair roads than to build a parkway. These people suggest that a tax on gravel to fund the parkway would probably be unopposed. This is due to the belief that the public would not see it as a tax on themselves. When the road departments run out of money because of this new tax, they believe the taxpayer will willingly raise the taxes on themselves to cover the shortfall and will probable never see the "hidden tax" that actually went to the parkway. These type of taxes are clearly opposed within the "Successful Parkway Ingredients."

3. Parkway Security, Cleanness, and Controlled Access:

The citizens of our communities have clearly experienced what can go wrong with a waterfront parkway. Skaggs Bridge, Lost Lake, and Avocado Lake may have been "good ideas," but have in fact become slum areas. The environment in these areas has been ruined and crime is out of control. No new lands should be dedicated to a parkway without clear public and environmental protection. These areas must be adequately funded in order to stay open. The parkway must be designed with controlled access points that can be secured at night. Controlled access must also be designed so that parts of the parkway can be closed without closing the entire parkway. It is

possible that some parts of the parkway may become unacceptable while other parts are clean and safe. The parkway must be designed so that it can be controlled. An under funded, uncontrolled parkway could easily turn into a nightmare without a solution.

4. State Lands Commission:

The State Lands Commission has only a claim, and nothing but a claim, to lands and the public trust easement on underlying and adjacent parcels belonging to private owners. If a Parkway Plan is developed, a legitimate and fair resolution of the claims by the State Lands Commission needs to be a priority. It is in the best interest of the Parkway, the environment and the community to clearly "grandfather" agricultural uses and rights along the San Joaquin River on these lands. The rights of property owners to restrict trespass should be addressed and resolved as part of the planning for any new parkway.

5. Historical Uses:

No Parkway improvements or policies should interfere with historical farming procedures (either adjacent or downstream), gravel extraction, or interfere with flows of flood water or with flood protection work in the river channel. (i.e. No endangered species or habitat should be added or introduced into the Parkway that could interfere with these items.) Before any park or Parkway is developed, the river channel should be rehabilitated and maintained to prevent the water stage at the flood release of 8,000 cfs from rising above the corresponding stage of pre-Friant condition presented in the CVP Authorizing and Operating Documents. There should be a buffer zone (owned by the parkway) between any park or Parkway and private land to afford protection for said private land.

6. Downstream Property Owners:

The Parkway can have serious consequences downstream from its boundaries. Any rules needed to be enforced within the Parkway should be enforced downstream from the Parkway to the extent traffic increases downstream. Any Parkway police need to have authority and funding to police downstream areas adjoining the river which are effected by increased Parkway utilization.

7. Commitment to Buy:

Lands should not be designated for parkway use by any government agency without a commitment to buy. Assemblyman Bill Jones successfully negotiated a matrix with the San Joaquin River Parkway Trust and the USJRA that addresses this issue. The property owners will not accept their lands being designated for a parkway without a commitment to buy.

Designating land for a parkway, without a commitment to by would destroy land use options, destroy property values, and cause tremendous turmoil and costly legal battles in our community.

The San Joaquin River Parkway is a major undertaking. If completed, many property owners will be removed from their land, and the community will take on a major new fiscal responsibility. The USJRA will work with the community as long as their members are treated fairly. We have worked cooperatively with many community organizations in adopting the "Successful Parkway Ingredients". The copy of the ingredients that we adopted are attached to this letter. Almost identical policy statements on the parkway have been adopted by the following organizations to date:

Fresno County Farm Bureau, Madera County Tax Payers' Association, Lower Levee District, Property Owners Committee, Associated General Contractors Association, San Joaquin Flood Control Association, Building Industry Association, Madera County Farm Bureau, Fresno County Chamber of Commerce, Rio Mesa, Friant Area Association, and the San Joaquin Tax Payers Association.

We assume that governmental bodies will closely follow these ingredients as we move forward in this process. Our association will continue to work positively with other community organizations. We appreciate the cooperation and effort many individuals have invested to serve the public.

Much work needs to be done with this plan before it would be acceptable to the voters and taxpayers. Many of the task force members felt that the estimated costs within this plan were not even close to what the parkway would actually cost and a trail along the river could turn into a haven for the homeless.

It is now time for our elected officials and the voters to decide if we want to commit our tax dollars to this project. If our elected officials decide to move foreword on this project without the support and vote of the taxpayers then the parkway will most certainly turn our community into turmoil.

Respectfull

Jim Cobb

(NOTE: Some of our comments came from organizations like the Farm Bureau, Tax Payers Associations, Sun Made Growers, Homeowner Associations and others who were not represented in the task force but asked that we include their comments with our own.)

SAN JOAQUIN RIVER PARKWAY

Successful Parkway Ingredients

(Organizations or individuals who adopt the following ingredients to a successful parkway understand that they are abbreviated and not all encompassing. These conditions are established only as an outline in order to keep planning realistic and within our communities capacity to complete.)

- 1. A parkway must be affordable and realistic. Plans should not be drawn that do not include estimated cost with all assumptions spelled out, property values outlined, and related costs disclosed. Plans and proposed funding should have specific fall back positions in case all or some of the funding does not become available.
- **2.** Private property rights must be observed. Any land that is included within a parkway plan must be purchased within a reasonable length of time (i.e. 3 years) and if not purchased by then, the land would be automatically removed from the plan. (Compare California Health and Safety Code Section 33399) All parkway land purchases should be made between willing sellers and willing buyers without duress.
- **3.** The parkway beneficiaries (users) should pay for the parkway. The parkway property owners, gravel operators or other assemblies should not be required to pay for the parkway.
- **4.** Public trails will have to be placed almost entirely on public lands and in a manner that protects the environment and private property rights. (Private property owners generally do not want public trails on or near their land.) The parkway must assume responsibility for parkway patrons and their actions on parkway land and nearby lands that parkway patrons might utilize.
- **5.** No parkway improvements or policies should interfere with normal farming procedures, gravel extraction, or interfere with flows of flood water or with flood protection work in the river channel. (i.e.. No endangered species or habitat should be added or introduced into the parkway that could interfere with these items.)
- **6.** Any taxes or benefit assessment fees to fund the parkway must be placed on a ballot for voter approval. (Voters should have the right to approve the cost of the parkway project and determine its value in relationship to other community needs.)
- **7.** If there is a new governing parkway agency
- A. It must be controlled by locally elected officials (i.e. supervisors and city council members from the districts that encompass the parkway)
- B. It cannot make land use recommendations on land that they do not own. Any buffer zones must be purchased by parkway and not just imposed on existing property owners.
- C. It cannot control any land that they do not own unless they have written authorization from the land owner.
- D. It must close any part of the park that they cannot afford to maintain in a clean and safe manner and adequately protect the wildlife, habitat and adjacent property owners rights from parkway patrons.
- --The task force should clearly guarantee the points discussed here, or it should leave future park planning to the existing local governing bodies who are accountable to its citizens. In no way should the State of California try to impose something on local governments that there is not broad based support.--

This document has been prepared by a coalition of citizens and organizations who believe taxpayers should approve this major governmental expenditure and that all parties be treated fairly.

MADERA

IRRIGATION

DISTRICT

12152 ROAD 281/4

MADERA, CA 93637

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DENSLOW GREEN Legal Counsel April 21, 1992

Mr. David Martinez
Program Manager
San Joaquin River Parkway Plan
Department of Parks and Recreation
Post Office Box 942896
Sacramento, California 94296-0001

Dear Mr. Martinez:

Pursuant to the authorities extended to the San Joaquin River Parkway Task Force at its March 30, 1992 meeting, the following shall constitute statement of concerns of Task Force Member Robert L. Stanfield representing the Madera Irrigation District.

Initially I would like to reiterate in quotation my vote at the above referenced meeting:

"Like each member of the Task Force at this table, the Madera Irrigation District has considerable reservations and concerns relative to the final draft of the San Joaquin River Parkway Plan. However, I have found that the Final Parkway Plan satisfies the mandate of AB 3121 and does not abrogate the constitutional authorities, including right of vote of individual indebtedness. I accept the plan in concept and in contemplation of filing a Statement of Concern for inclusion in the Appendix of the Plan documents. I further request that the plan document be submitted to local governing jurisdictions for review and public comment."

Essentially most of the concerns that were identified in my transmittal of February 7, 1992 to Dangermond & Associates, Parkway Consultants, remained in the Final Draft of the Parkway Plan. However, legislative formation of a locally governed conservancy as the management entity of the parkway provides the format for the future to address the number of concerns included in the February text.

David Martinez, Program Manager
Department of Parks and Recreation
Sacramento - April 21, 1992 - page 2

I do wish to lend emphasis on specific issues that were previously expressed. Obviously the plan is too grandiose in scope in the reality of today's available funding. It is recognized that the plan is conceptional and will require many years to fruition. I cogently encourage that the conservancy proceed with a significantly scaled down parkway plan, that the initial developments be restricted to the area between Lane's bridge (Highway 41) and the Friant Dam. The "small is beautiful" development approach can be in harmony with the long term plan yet retain fiscal integrity of available funding. It would also allow a more realistic evolution of future parkway developments.

The San Joaquin River flows and parkway are integral. Without a viable river the parkway would surely fail. The parkway plan identifies numerous components that would require additional flows to be released from Friant Dam to the San Joaquin River. There is currently no appropriation nor opportunity for adjudication of additional waters without erosion of existing contracts and water rights. The ultimate parkway should not incorporate, nor support, the reestablishment of the anadromous fisheries. The additional water to sustain such a fishery would result in decay of local agricultural economy, the very fabric of a tax base necessary to support a future parkway.

I would strongly encourage that at the very earliest date legal counsel with water rights expertise be retained to evaluate future water entitlements available for the parkway. This evaluation should include endowments in which water rights may be transferred through multiple agency exchange for increased flows below Friant Dam.

Another principal concern is the commitment to the contiguous and vicinity property owners. It is paramount and they are deserving assurance that they should not experience trespass, vandalism and crime associated with the populace use of the parkway. Law enforcement and protection, not only of the parkway, but of the lands within the sphere of influence of the parkway must be of the highest priority of the management entity in the future operation of the parkway. Law enforcement contemplated in the parkway plan is woefully understated and funded.

Tenet to the future growth of the parkway must be equitable resolve of the claims of the State Lands Commission. A bias involvement of parkway proponents would jeopardize the ultimate parkway plan. Recognition of long established agricultural uses within the San Joaqun corridor should be given preference in parkway planning.

David Martinez, Program Manager Department of Parks and Recreation Sacramento - April 21, 1992 - page 3

It is inordinately important that the conservancy promulgate confidence and support of the land holders in the vicinity, and assessment constituency to fund adequate annual operation and maintenance. Inadequate funding is a very short avenue to failure.

Let's allow the process of public involvement and vote to achieve a San Joaquin Parkway in the future that the land owners, residents and users of the parkway can in concert look with pride.

Yours very truly,

MADERA IRRIGATION DISTRICT

Robert L. Stanfield

General Manager-Chief Engineer

RLS:dl

c: Assemblyman Jim Costa

Dangermond & Associates, Inc.

Lower San Joaquin Levee District

11704 West Henry Miller Avenue, Dos Palos, CA

Telephone: (209) 387-4545

Directors Lloyd Roduner, Chairman Henry J. Favier, Vice Ch. John Enrico Paul Hunger, Jr. Robert D. Kelley, Jr. Donald C. Skinner Keith Watkins

Secretary-Manage: Reggie N. Hill

Superintendent James E. Bate:

April 17, 1992

Mr. Ross Henry San Joaquin River Parkway Task Force Department of Parks and Recreation P. O. Box 942896 Sacramento, CA 94296-0001

> Statement for Appendix Attachment to Final San Joaquin River Parkway Plan

Members of the San Joaquin River Parkway Task Force have been offered an opportunity to submit comments for inclusion in the Appendix to the final Parkway Plan which was adopted on March 30. The purpose of these comments is to clarify both our areas of satisfaction with the plan, and our remaining areas of concern.

We address first our areas of satisfaction. We are pleased with the Special Policies Relating to Flood Management, and the statement on protection of water rights and associated diversion facilities on page 21 and 22 and the first two lines on page 46. With these additions we support the Plan as it relates to concerns over flood protection and water rights, although we question some of the discussion in the last paragraph of page 45. We believe that paragraph should be deleted. If done "right", the Parkway can have tangible benefits to the public, the environment, to agriculture, and to landowners along the river.

Our concerns center on the protection of adjacent and downstream properties and on threats to private land ownership. Recent claims by the State Lands Commission have accentuated these concerns and caused a greater scrutiny of the Plan in these regards.

The reference to the Lands Commission's claims on page 99 is presented in a neutral manner. However, these claims are of very great concern to all property owners along waterways throughout the State. This will be a very contentious matter which may long delay the acquisitions needed to proceed with the parkway. Despite the neutrality in the written plan, it is widely believed that proponents of the Parkway have encouraged the Lands Commission's claims.

San Joaquin River Parkway Task Force April 14, 1992 Page Two

The Commission's action is widely perceived to be a land grab by the State in an underhanded manner; a taking of private property without compensation. The issue of state versus private ownership needs to be resolved. However, where private owners have recorded deeds and paid taxes for decades or generations the presumption of ownership should be on their side. The Commission should bear the burden of obtaining a judicial review in which they bear the burden of proof of their case. It is outrageous merely to make assertions which cloud land titles, and thereby disrupt land transactions and the use of land as financial collateral. This puts the burden of defense on beleaguered landowners who are then picked off one by one. The commission's offer to negotiated settlements attests to the uncertainty of their case, and appears to indicate a desire to extort what they can get without a judicial review wherein they bear the burden of proof.

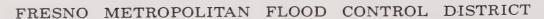
We believe the Task Force should explicitly state its neutrality on this issue, and should urge that the Commission seek a single judicial review, in which they bear the burden of proof and including all their claims within the Parkway.

Regardless of the outcome of this matter the Plan needs further clarification regarding protection of adjacent and downstream properties from impacts arising from the Parkway, including increased exposure to public liability. Downstream parties are potentially affected by precedents established in Parkway management as well as by possible increases in public activity emanating from the Parkway along the river below the Parkway. To control these impacts it may be necessary, for example, to have a high standard perimeter fence, to close the Park at night, and to have the authority and financial capability to prevent the public from going downstream along the river corridor.

These comments reflect the views of the Lower San Joaquin Levee District and are endorsed by the San Joaquin River Flood Control Association.

Sincerely,

Reggie N. Hill, Secretary-Manager



March 27, 1992 File No.: 781

Mr. David Martinez
Program Manager
San Joaquin River Parkway Plan
Department of Parks and Recreation
P. O. Box 942896
Sacramento, CA 94296-0001

Dear Dave,

FINAL MEETING SAN JOAQUIN RIVER PARKWAY TASK FORCE CONSIDERATION OF FINAL PARKWAY PLAN

Our agency has reviewed the draft of the final plan which has been distributed to us. We have determined from our review the plan adequately addresses the flood control concerns believed by the District to be important relative to the development of a parkway within the San Joaquin River bottom. Because I will be in Washington D.C. for hearings related to other business of the District, it will not be possible to attend the March 30, 1992 meeting. Further, because of scheduled public meetings on local water resources planning, my alternate will also be unable to attend. You are therefore free to use this letter as an indication of our support for adoption of the plan in its current form.

It has been our perspective that the purpose of the parkway plan was to identify that which could be practical and feasible and to present the issues which must be addressed to secure such a reality. This view might be different from some who would look to the plan to provide answers to all implementation questions. It is my opinion that the plan before the Task Force adequately accomplishes the function, as we have understood it, of this specific planning effort.

We believe the plan fairly outlines for the community those features which are feasible and potentially desirable for inclusion in a river parkway. We further believe the plan fairly identifies the implementation challenges which the community must address. We therefore believe it is a plan which can be placed before the community for the purpose of determining its support for, and guiding the implementation of, the San Joaquin River Parkway.

It has been a privilege to be a part of this process and our thanks are extended to you, Mr. Costa, to the Department staff and to the other members of the Task Force who have so diligently invested their time in this most worthy effort.

YEARS OF SERVICE

Mr. David Martinez March 27, 1992 Page Two

If we can be of further assistance in the process, please contact us.

Very truly yours,

Doug Marrison

General Manager-Secretary

DH/jc

FRESNO SAND AND GRAVEL PRODUCERS

AL'S CONCRETE

PUADA ASSOCIATES

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CALMAT

402 W. Bedford, Suite 116 Fresno, California 93711 (209) 432-4902 FAX (209) 432-4097

CROOKSHANK READY-MIX INDUSTRIAL ASPHALT STEWART & NUSS

April 29, 1992

San Joquin River Parkway Task Force California Department of Parks and Recreation P.O. Box 942896 Sacramento, Ca 94296-0001

RE: Position on the Final Draft of the San Joaquin River Parkway Plan as prepared for the San Joaquin River Parkway Task Force

Dear Task Force Members:

The Fresno Sand and Gravel Producers wishes to express their appreciation for the opportunity to participate on the San Joaquin River Parkway Task Force over the past year. The idea and planning for a Parkway has been going on for many years. The concept of a Parkway has taken many forms for different people and interests since there has been no official adopted plan. Consequently it has been very difficult for property owners and businesses in the riverbottom and the surrounding area to plan for the future.

It is time for the Parkway to be presented to the Board of Supervisors of Fresno and Madera Counties and the Fresno City Council and for those elected bodies to adopt an official plan regarding a Parkway in the San Joaquin river bottom. We believe that the Final Draft of the San Joaquin River Parkway Plan as prepared by Dangermond & Associates contains the necessary direction and policies to the community for the development of a Parkway. Fresno Sand and Gravel Producers has some reservations about certain aspects of the Plan. However, we are voting in favor of the Plan in order for it to be presented to the three elected bodies for their review and ultimate decision and further for any proposed taxes or fees to be voted on by the public.

We reserve the right to raise objections before those bodies to certain portions of the Plan which need further revisions or deletion. Such objections include, but are not limited to, the following: Fresno Sand and Gravel Producers remains opposed to the proposed Mineral Severance Tax. It unfairly targets a specific industry while ignoring others in the river bottom. In its present form it appears difficult if not impossible to implement and administer for material being imported into the area. The result will be a competitive disadvantage to the San Joaquin River operators. The Plan also contains operational and reclamation standards which need further review.

San Joaquin River Parkway Task Force April 29, 1992 Page 2

In addition, although the Plan only references the existence of a claim by the State Lands Commission to lands currently in private ownership, we are concerned that this claim will be promoted as a way to acquire private lands for the Parkway without compensation. It should be made clear that the Task Force is specifically opposed to such actions as a way to achieve the Parkway.

We request that this letter be forwarded to the Fresno and Madera Boards of Supervisors and the Fresno City Council along with the recommendation on the Plan by this Task Force.

Again thank you for the opportunity to be a part of this worthwhile process.

Sincerely,

John C. Buada

Chairman



Public Works & Development Services Department

Richard D. Welton Director

May 26, 1992

Assemblyman Jim Costa State Capitol Room 2158 Sacramento, CA 95814

Dear Assemblyman Costa:

SUBJECT: SAN JOAQUIN RIVER PARKWAY PLAN

Enclosed is an executed copy of the final Resolution of the San Joaquin River Parkway Plan that was approved by the Fresno County Board of Supervisors on May 19, 1992. This action reflects the Board's continued support of multiple open space uses in the San Joaquin Riverbottom and our commitment to the Parkway concept.

If you have any questions regarding the Resolution or if I can be of assistance, please call me (209) 453-5055.

Very truly yours,

Carolina Jimenez-Hogg

Development Services Manager

CJH:mar 6005e

Enclosure

OF THE COUNTY OF FRESNO STATE OF CALIFORNIA

RESOLUTION ACCEPTING THE FINAL SAN JOAQUIN RIVER PARKWAY PLAN AS PREPARED BY DANGERMOND AND ASSOCIATES AND SUPPORTING ASSEMBLY BILL 2452, AS AMENDED, TO CREATE THE SAN JOAQUIN RIVER CONSERVANCY

IN THE MATTER OF THE) SAN JOAQUIN RIVER PARKWAY)

WHEREAS, Assembly Bill No. 3121 was introduced by Assemblyman Jim Costa in the 1990 session of the State Legislature setting forth general goals for a Plan for the river corridor; and

WHEREAS Assembly Bill No. 3121 appropriated \$200,000 in State funds for the plan and provided for a San Joaquin River Parkway Task force to take the lead in the planning process; and

WHEREAS, in May, 1991, the State Department of Parks and Recreation awarded a contract for preparation of the San Joaquin River Parkway Plan to Dangermond and Associates; and

WHEREAS, Dangermond and Associates held several meetings and workshops with the full Task force and interested members of the community; and

WHEREAS, a draft San Joaquin River Parkway Plan was prepared by Dangermond and Associates for Task force review and public comment; and

WHEREAS, on March 10, 1992, the Board of Supervisors considered the draft Plan and directed their Task force representative to present the Board's concerns to the Task force and report back on the action taken at the March 30, Task force meeting; and

WHEREAS, the Board's concerns included, but were not limited to, the need for the Plan to clearly indicate that there shall be voter approval of any taxes, surcharges, assessments, or fees (except user fees) required for, or resulting from, implementation of the Parkway Plan and that there will be no net cost or added liability to the County as a result of the Plan; and

WHEREAS, on March 17, the final San Joaquin River Parkway
Plan was received by Fresno County; and

WHEREAS, on March 26, Assemblyman Costa responded in writing to the Boards concerns; and

WHEREAS, at the March 30, Task force meeting the final Plan was approved by a vote of 16 to 4, with 2 abstentions and 3 absent; and

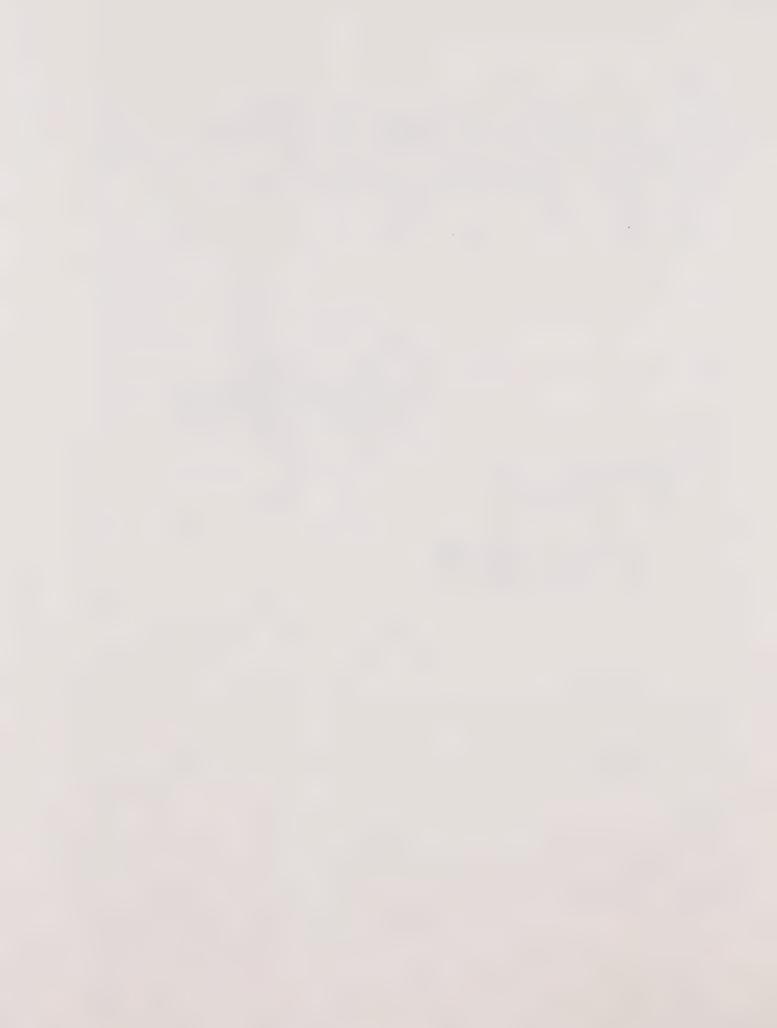
WHEREAS, on April 2, Assemblymen Costa and Bronzan introduced to the Legislature an amendment to Assembly Bill 2452, proposing to create the San Joaquin River Conservancy; and

WHEREAS, the final San Joaquin River Parkway Plan, together with Assemblyman Costa's commitments and Assembly Bill 2452, as amended, effectively address the Board's concerns.

NOW, THEREFORE, BE IT RESOLVED that the Fresno County Board of Supervisors hereby accepts the final San Joaquin River Parkway Plan as prepared by Dangermond and Associates and supports AB 2452, as amended; and

BE IT FURTHER RESOLVED that when funding is secured for preparation of the environmental work and any necessary General Plan amendments the Board will further consider an amendment to the County General Plan relating to the Parkway.

THE FOREGOING was passed and adopted by the following vote of the Board of Supervisors of the County of Fresno this 19th day of May, 1992, to-wit: AYES: Supervisors Koligian, Levy, Conrad, Oken, Vagim NOES: None ABSENT: None ATTEST: SHARI GREENWOOD, Clerk Board of Supervisors File #10881 Item #8 Resolution #92-418



TO

City of



Development Department

City Hall • 209-498-1591 • FAX 488-1020 Alvin P. Solis, AICP 2600 Fresno Street Director

April 28, 1992

Please reply to: Nick Yovino 209 498-1361

Jeffrey D. Arthur Dangermond and Associates, Inc. 1721 Second Street, Suite 203 Sacramento, California 95814

Dear Mr. Arthur:

SUBJECT: CITY OF FRESNO COMMENTS ON THE FINAL DRAFT

SAN JOAQUIN RIVER PARKWAY PLAN

Please include the following three comments on the Final Draft of the San Joaquin River Parkway Plan from the City of Fresno. Pursuant to the March 30, 1992, San Joaquin River Parkway Taskforce meeting, it is understood that these comments will be made a part of the Plan addendum.

- The City remains opposed to any language or recommendation in the Plan which states or infers that urban level development is possible or should be permitted in the Riverbottom. This opposition also applies to any "clustering" of residential development in the Riverbottom.
- The City believes that costs for developing and maintaining the Parkway should be applied to government agencies, special interests, and citizens in a fair and equitable manner.
- The proposed recreation area outside of the Riverbottom and between Highway 99 and the Riverside Municipal Golf Course is inconsistent with the City's Bullard Community Plan and General Plan, which designate the property for light industrial uses. Further analysis of the proposed recreation area and changes to the City's adopted Plans, therefore need to be considered by the City.

Thank you for the opportunity to provide these comments on the Final Draft of the San Joaquin River Parkway Plan. Please call me or Nick Yovino, if you have any questions.

Alvin P. Solis

Director

PLN441/+1215

c: Fresno City Council
Michael Bierman
Robert Baida
Harvey Wallace





CITY OF CLOVIS

CITY HALL • 1033 FIFTH STREET • CLOVIS, CA 93612 (209) 297-2320

Dangermond and Associates 1721 2nd Street, Suite 203 Sacramento, CA 92324

Dear Mr. Dangermond:

Recently there have been concerns expressed to me on behalf of property owners farming land to the south of the proposes San Joaquin River Parkway boundary. I feel these concerns are valid, and in the interest of fairness to all, should be addressed.

These concerns relate to the Public Trust claims to agricultural lands by the State Lands Commission. The San Joaquin River, like any other river, has shifted its boundaries over the years, resulting in considerable confusion over the State's rightful claim to public land. For the sake of all involved, these boundaries must be clarified as soon as possible. Should the State Lands Commission determine to go to the high water mark with their claims, it could severely impact the property owners ability to make vital decisions concerning their land, and could even result in the confiscation of portions of that land.

I believe that we should all keep in mind the fact that these property owners have been farming this land for many years, not only earning their livelihood from the land, but also paying property taxes and various assessments on fruit trees and other agricultural improvements.

The San Joaquin River Parkway Plan stresses support for agricultural interests within the Parkway. We must also emphasize our support for those farming interests that lie below the Parkway boundary, granting them the same rights to protect their property as afforded individuals residing within the Parkway itself. We must stress that no property be taken without public hearings to mitigate the concerns of those involved, and that all potential takings be subject to the judicial review process in which the Lands Commission must bear the burden of proof of their case. In the event of a land taking, all property owners must be compensated at today's fair market value for their land.

It is my hope that by demonstrating a willingness to work with all those involved in this Plan, and to fairly address their concerns, we will expedite what is now the dream of the San Joaquin River Parkway into a reality.

Sincerely,

Patricia Wynne

Councilmember and Clovis Representative to the

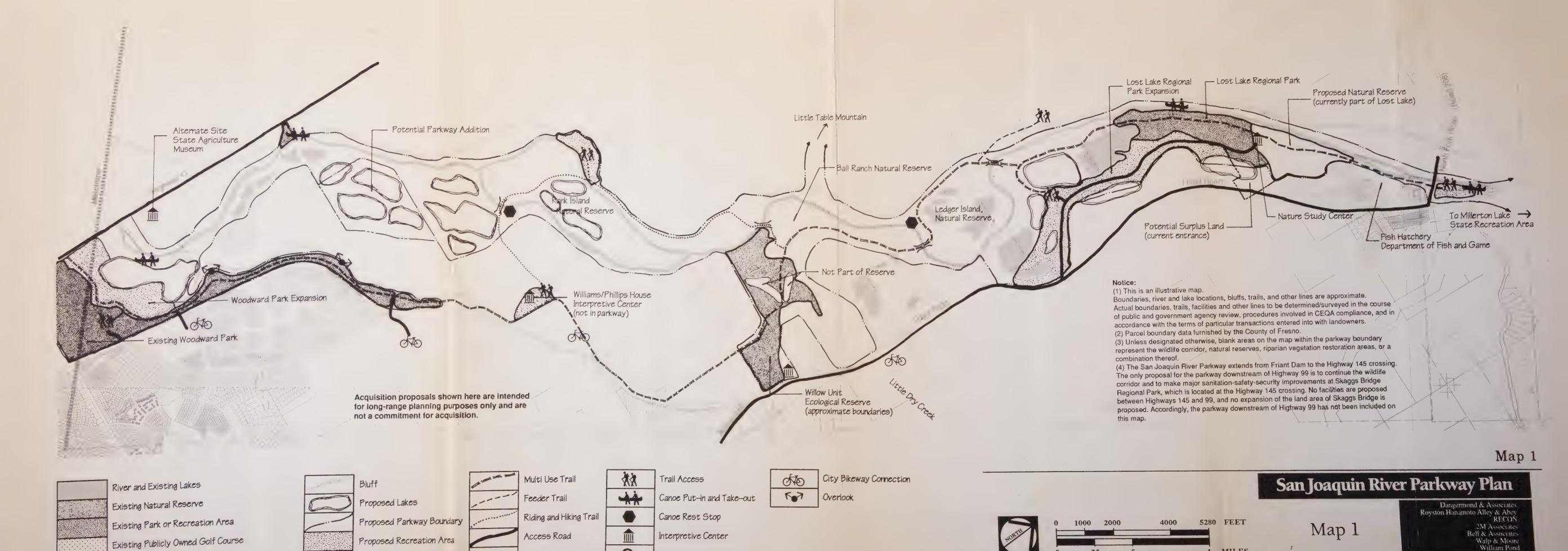
Patricia Wymne

San Joaquin River Parkway Task Force
City Council

m Dave Lawson, Mayor • Glynn Bryant, Mayor Pro Tem

Harry Armstrong, Councilmember • Leif Sorensen, Councilmember • Pat Wynne, Councilmember Kathleen A. Millison, City Manager





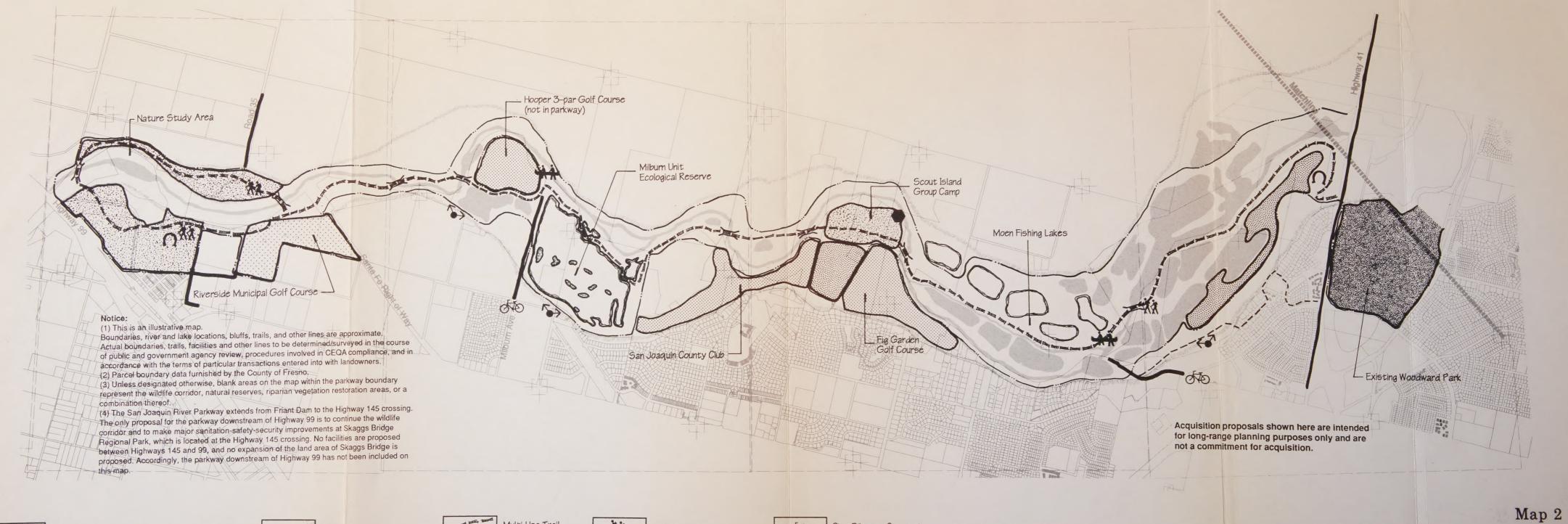
Equestrian Facility

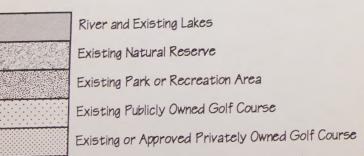
Existing or Approved Privately Owned Golf Course

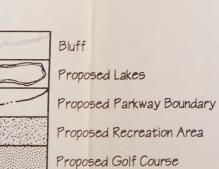
Proposed Golf Course

DA 91073 3/92a

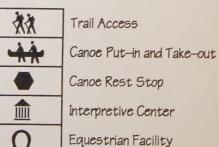








Multi Use Trail Feeder Trail Riding and Hiking Trail Access Road





City Bikeway Connection





Map 2

Dangermond & Associates Royston Hanamoto Alley & Abey RECON
2M Associates
Bell & Associates
Walp & Moore
William Pond





